

# **Bay Area Air Quality Management District**

939 Ellis Street  
San Francisco, CA 94109  
(415) 771-6000

## **Permit Evaluation and Statement of Basis For RENEWAL of**

## **MAJOR FACILITY REVIEW PERMIT**

for  
**Ball Metal Beverage Container Corporation  
Facility #A0148**

**Facility Address:**  
2400 Huntington Dr.  
Fairfield, CA 94533

**Mailing Address:**  
9300 West 108th Circle  
Broomfield, CO 80021

July 2014

Application Engineer: Tamiko Endow  
Site Engineer: Simon Margolis

Title V Renewal Application: 23415  
NSR Applications Included: 16426, 21856, 24253, 24281

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**Title V Statement of Basis**  
**Ball Metal Beverage Container Corporation, PLANT # A0148**  
**APPLICATION # 23415**

**A. BACKGROUND**

Ball Metal Beverage Container Corporation (BMBC) is subject to the Operating Permit requirements of Title V of the federal Clean Air Act, Part 70 of Volume 40 of the Code of Federal Regulations (CFR), and BAAQMD Regulation 2, Rule 6, Major Facility Review because it is a major facility as defined by BAAQMD Regulation 2-6-212. It is a major facility because it has the “potential to emit,” as defined by BAAQMD Regulation 2-6-218, of more than 100 tons per year of a regulated air pollutant and is therefore required to obtain and operate under a Major Facility Review/Title V permit pursuant to District Regulation 2-6-304.

Major Facility Operating Permits (Title V permits) must meet the requirements of 40 CFR Part 70, as specified in BAAQMD Regulation 2, Rule 6. The permits must contain all applicable requirements (as defined in BAAQMD Regulation 2-6-202), monitoring requirements, recordkeeping requirements, and reporting requirements. The permit holders must submit reports of all monitoring at least every six months and compliance certifications at least every year.

In the Bay Area, state and District requirements are also applicable requirements and are included in the permit. These requirements can be federally enforceable or non-federally enforceable. All applicable requirements are contained in Sections I through VI of the permit.

Each facility in the Bay Area is assigned a facility number that consists of a letter and a 4-digit number. This facility number is also considered to be the identifier for the permit. The identifier for this facility is A0148.

This facility received its initial Title V permit on July 28, 1999. The permit was renewed on December 13, 2006. Although the current permit expired on December 12, 2011, since BMBC submitted the application for renewal of the permit by the deadlines set out in Section I.B of the permit, the permit continues in force until the District takes final action on the application for permit renewal.

Pursuant to Regulation 2, Rule 6, Section 416, the District has reviewed the terms and conditions of this proposed Major Facility Review permit and determined that they are valid and correct. This review included an analysis of all applicability determinations for all sources. The review also included an assessment of the sufficiency of all monitoring for determination of compliance with applicable requirements.

The District is proposing to renew the Major Facility Review permit, with all changes to the permit since the last renewal identified in strikeout/underline format. These changes are discussed in this Statement of Basis. The Statements of Basis for prior issued Major Facility Review permits are incorporated by reference and are available upon request.

## **B. FACILITY DESCRIPTION**

Ball Corporation owns and operates the Ball Metal Beverage Container Corporation (Facility Site #A0148), located in Fairfield, CA. This facility has been in operation at this location since 1976 and produces 2-piece aluminum cans. There are three can manufacturing lines operated at the facility, consisting of forming equipment, printers, coaters, spray coaters, curing ovens, and washing operations. The facility operates baghouses to abate particulate emissions from the spray coating lines and a Regenerative Thermal Oxidizer (RTO) to abate the volatile organic compound emissions from the coating operations, which are emitted from the curing ovens.

Cans are formed and trimmed from coiled aluminum sheet at the Draw and Iron (D&I) machines. The formed cans are conveyed from the D&I machines to can washers; the D&I and washing equipment are exempt from District permit requirements. After washing, a basecoat is applied to some cans, and these cans are sent to an oven to cure the basecoat before printing inks are applied. All cans go through printing, then an overvarnish is applied, and the cans are again cured at an oven. A protective interior coating is then sprayed on the interior of the cans, an identification code is printed on the bottoms of the cans, and they are cured a final time at bake ovens prior to undergoing a neck and flange forming process. After final inspection, the cans are palletized for shipping. There is one end press operated at the facility which forms can ends from coiled sheet aluminum, and an end sealing compound is applied to the perimeters of the can ends. The can end forming and end sealing compound application are exempt from District permit requirements.

Most coatings are received in bulk 55 gallon drums. Some coatings are stored onsite in bulk tanks. Other sources of emissions at this facility include natural gas boilers used for process heat, cold cleaners for cleaning printing components, wipe cleaning operations, emergency diesel generators, and a fire pump. There are also several operations at the facility that are exempt from the District's permit requirements, including a Can Neck Lubricating Operation (S-50), natural gas boilers (S-71 and S-72), 3 Washers equipped with 8 MM BTU/hour natural gas-fired drying ovens (S-73, S-74, and S-75), miscellaneous storage tanks, steam cleaners, heaters, cooling towers, compressors/pumps, and maintenance shop equipment. The two natural gas boilers S-71 and S-72 are significant sources with potential emissions in excess of 2 tons per year, so have been included in the permit. The facility has indicated that there is no portable equipment, permitted through the state's Portable Equipment Registration Program, operated at this site.

### Emissions

The main air emissions at this facility are volatile organic compounds (VOC) from application of coatings at the can manufacturing lines. These VOC emissions include certain toxic air contaminant (TAC) and hazardous air pollutant (HAP) emissions, including formaldehyde, glycol ethers, methanol, and xylene. The VOC emissions from the can coating lines are subject to federal and local regulations which limit the VOC content of applied coatings. The facility currently applies only compliant coatings that meet the VOC content limits in both the federal and District regulations. However, both the federal and local regulations allow the facility the option to apply coatings with higher VOC contents, as long as the emissions to the atmosphere are controlled to a level equivalent to the application of compliant coatings. To apply "non-

compliant coatings,” District Regulation 8, Rule 11 requires the facility submit a proposed alternate emission control plan for review and approval on an annual basis.

The facility is also subject to District permit conditions limiting VOC emissions from specified coating lines. To meet these emission limits, the facility operates a regenerative thermal oxidizer which abates the fraction of VOC emissions emanating from the curing ovens associated with all 3 can coating lines. The RTO destroys most of the organic compounds and TACs/HAPs from the coating emissions, but is also a source of emissions itself, since it produces secondary combustion pollutants, including nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), particulate matter (PM), and sulfur dioxide (SO<sub>2</sub>), from combustion of the organic compounds and natural gas. Use of the RTO is not required to comply with the VOC limits in federal or District regulations at this time, since only compliant coatings are currently being applied. In addition to the RTO, two baghouses are operated to abate the particulate matter (PM) emissions from the interior coating spray banks.

The storage tanks, cold cleaners, and wipe cleaning operation at the facility also generate VOC emissions. These operations are sources of fugitive VOC emissions and are not abated. Operation of the coating ovens, boilers, emergency diesel generators, and fire pump also result in criteria pollutant and greenhouse gas emissions (GHG) from the combustion of fuel (natural gas and diesel), which are subject to a number of District and state regulations detailed in the permit.

The facility emissions from the District’s current emission inventory for permitted and significant sources have been summarized below in Table 1. Emissions from the 2 significant, permit-exempt natural gas boilers (6 MM BTU/hour, each) have been included, since the potential to emit exceeds 2 tons per year of CO from each boiler.

Unless stated otherwise, the emissions in Table 1 were based on the operating data reported by the facility for the year ending March 2013 and the emission factors and material formulations stored in the District’s database for each source and abatement device.

**Table 1**  
**Site #A0148, Ball Metal Beverage Container Corporation**  
**Current Facility Emissions from Permitted and Significant Sources**  
**Year Ending March 2013**

| Source Number/Description                    | Emissions (tons/year) |        |                 |                 |       |
|--|-----------------------|--------|-----------------|-----------------|-------|
|  | PM10                  | VOC    | NO <sub>x</sub> | SO <sub>2</sub> | CO    |
| S-4, Deco Oven, Line 1 – coating             | --                    | 0.110  | --              | --              | --    |
| S-4, Deco Oven, Line 1 – fuel combustion     | 0.008                 | 0.016  | 0.389           | 0.002           | 0.097 |
| S-5, Basecoat Oven, Line 2 - coating         | --                    | 0      | --              | --              | --    |
| S-5, Basecoat Oven, Line 2 – fuel combustion | 0.0001                | 0.0002 | 0.005           | 0.000           | 0.001 |
| S-6, IC Oven #1 - coating                    | --                    | 0.438  | --              | --              | --    |
| S-6, IC Oven #1 – fuel combustion            | 0.014                 | 0.027  | 0.649           | 0.003           | 0.162 |
| S-7, IC Oven #2 - coating                    | --                    | 0.493  | --              | --              | --    |
| S-7, IC Oven #2 – fuel combustion            | 0.176                 | 0.074  | 1.112           | 0.005           | 0.185 |

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2400 Huntington Drive, Fairfield, CA 94533

| Source Number/Description                             | Emissions (tons/year) |               |             |             |              |
|---|-----------------------|---------------|-------------|-------------|--------------|
|   | PM10                  | VOC           | NOx         | SO2         | CO           |
| S-12, Printer #1 with Over Varnisher, Line 1          | --                    | 7.811         | --          | --          | --           |
| S-13, Printer #2 with Over Varnisher, Line 2          | --                    | 8.505         | --          | --          | --           |
| S-16, Interior Coating Spray Bank, Line 1             | --                    | 29.218        | --          | --          | --           |
| S-17, Interior Coating Spray Bank, Line 2             | --                    | 33.306        | --          | --          | --           |
| S-24, Interior Coating Spray Bank, Line 3             | --                    | 53.235        | --          | --          | --           |
| S-27, Printer #31 with Overvarnish, Line 3            | --                    | 6.953         | --          | --          | --           |
| S-31, Bulk Tank, Overvarnish                          | --                    | 0.055         | --          | --          | --           |
| S-35, Wipe Cleaning                                   | --                    | 0.128         | --          | --          | --           |
| S-44, Cold Cleaner                                    | --                    | 0.110         | --          | --          | --           |
| S-45, Cold Cleaner                                    | --                    | 0.110         | --          | --          | --           |
| S-46, Cold Cleaner                                    | --                    | 0.110         | --          | --          | --           |
| S-51, Basecoater, Line 2                              | --                    | 3.011         | --          | --          | --           |
| S-52, Bottom Coater, Line 2                           | --                    | 3.030         | --          | --          | --           |
| S-53, Deco Oven, Line 2 - coating                     | --                    | 0.128         | --          | --          | --           |
| S-53, Deco Oven, Line 2 – fuel combustion             | 0.014                 | 0.027         | 0.649       | 0.003       | 0.162        |
| S-55, Bottom Coater #31, Line 3                       | --                    | 2.993         | --          | --          | --           |
| S-56, Deco Oven #31, Line 3 - coating                 | --                    | 0.091         | --          | --          | --           |
| S-56, Deco Oven #31, Line 3 – fuel combustion         | 0.020                 | 0.037         | 0.908       | 0.004       | 0.227        |
| S-57, Bottom Coater #32, Line 3                       | --                    | 0.018         | --          | --          | --           |
| S-58, Decorator Oven #32, Line 3 - coating            | --                    | 0.091         | --          | --          | --           |
| S-58, Decorator Oven #32, Line 3 – fuel combustion    | 0.020                 | 0.037         | 0.908       | 0.004       | 0.227        |
| S-60, Printer #32 with Overvarnish, Line 3            | --                    | 7.045         | --          | --          | --           |
| S-61, Internal Coating Oven, Line 3 - coating         | --                    | 0.803         | --          | --          | --           |
| S-61, Internal Coating Oven, Line 3 – fuel combustion | 0.025                 | 0.048         | 1.168       | 0.005       | 0.292        |
| S-62, Bottom Coater, Line 1                           | --                    | 3.011         | --          | --          | --           |
| S-63, Interior Coating Storage Tank T1                | --                    | 0.091         | --          | --          | --           |
| S-64, Interior Coating Storage Tank T2                | --                    | 0.091         | --          | --          | --           |
| S-65, Emergency Standby Generator #1                  | 0.0001                | 0.007         | 0.018       | 0.0000      | 0.002        |
| S-66, Emergency Standby Generator #2                  | 0.0001                | 0.007         | 0.018       | 0.0000      | 0.002        |
| S-68, Ink Dot System, Line 3                          | --                    | 0.128         | --          | --          | --           |
| S-69, Ink Dot System                                  | --                    | 0.073         | --          | --          | --           |
| S-70, Fire Pump                                       | 0                     | 0             | 0           | 0           | 0            |
| S-71, Natural Gas Boiler (exempt) *                   | 0.073                 | 0.146         | 0.478       | 0.018       | 7.767        |
| S-72, Natural Gas Boiler (exempt) *                   | 0.073                 | 0.146         | 0.478       | 0.018       | 7.767        |
| A-5, Regenerative Thermal Oxidizer                    | 0.022                 | 0.042         | 1.038       | 0.004       | 0.260        |
| <b>Total Facility Emissions</b>                       | <b>0.44</b>           | <b>161.24</b> | <b>7.43</b> | <b>0.07</b> | <b>17.05</b> |

\* Since actual throughput data was not available for S-71 and S-72, the District included the maximum potential emission rates for S-71 and S-72 in Table 1.

For general comparison purposes, Table 2 below summarizes the estimated facility emissions from the District's emission inventory at the time the Title V permit for this site was renewed in 2006. These emissions were calculated based on usage data reported by BMBC for the 12-month period ending December 31, 2005. The emissions for A-5 were reconstructed based on the facilities estimate of natural gas usage at A-5 for that time period.

**Table 2**  
**Site #A0148, Ball Metal Beverage Container Corporation**  
**Estimated Facility Emissions from Permitted and Significant Sources**  
**2006 Title V Permit Renewal**

| Source Number/Description                     | Emissions (tons/year) |        |       |       |       |
|---|-----------------------|--------|-------|-------|-------|
|   | PM10                  | VOC    | NOx   | SO2   | CO    |
| S-4, Deco Oven, Line 1                        | --                    | 0.128  | --    | --    | --    |
| S-4, Deco Oven, Line 1 – fuel combustion      | 0.009                 | 0.017  | 0.419 | 0.002 | 0.105 |
| S-5, Basecoat Oven, Line 2                    | --                    | 0.055  | --    | --    | --    |
| S-5, Basecoat Oven, Line 2 – fuel combustion  | 0.009                 | 0.017  | 0.419 | 0.002 | 0.105 |
| S-6, IC Oven #1                               | --                    | 0.639  | --    | --    | --    |
| S-6, IC Oven #1 – fuel combustion             | 0.015                 | 0.029  | 0.698 | 0.003 | 0.174 |
| S-7, IC Oven #2                               | --                    | 0.858  | --    | --    | --    |
| S-7, IC Oven #2 – fuel combustion             | 0.184                 | 0.077  | 1.161 | 0.006 | 0.194 |
| S-12, Printer #1 with Over Varnisher, Line 1  | --                    | 6.698  | --    | --    | --    |
| S-13, Printer #2 with Over Varnisher, Line 2  | --                    | 7.939  | --    | --    | --    |
| S-16, Interior Coating Spray Bank, Line 1     | --                    | 31.773 | --    | --    | --    |
| S-17, Interior Coating Spray Bank, Line 2     | --                    | 39.931 | --    | --    | --    |
| S-24, Interior Coating Spray Bank, Line 3     | --                    | 66.412 | --    | --    | --    |
| S-27, Printer #31 with Overvarnish, Line 3    | --                    | 5.694  | --    | --    | --    |
| S-31, Bulk Tank, Overvarnish                  | --                    | 0.055  | --    | --    | --    |
| S-35, Wipe Cleaning                           | --                    | 0.529  | --    | --    | --    |
| S-44, Cold Cleaner                            | --                    | 0.274  | --    | --    | --    |
| S-45, Cold Cleaner                            | --                    | 0.274  | --    | --    | --    |
| S-46, Cold Cleaner                            | --                    | 0.274  | --    | --    | --    |
| S-51, Basecoater, Line 2                      | --                    | 3.577  | --    | --    | --    |
| S-52, Bottom Coater, Line 2                   | --                    | 1.661  | --    | --    | --    |
| S-53, Deco Oven, Line 2                       | --                    | 0.146  | --    | --    | --    |
| S-53, Deco Oven, Line 2 – fuel combustion     | 0.015                 | 0.029  | 0.698 | 0.003 | 0.174 |
| S-55, Bottom Coater #31, Line 3               | --                    | 1.624  | --    | --    | --    |
| S-56, Deco Oven #31, Line 3                   | --                    | 0.091  | --    | --    | --    |
| S-56, Deco Oven #31, Line 3 – fuel combustion | 0.021                 | 0.040  | 0.977 | 0.004 | 0.244 |
| S-57, Bottom Coater #32, Line 3               | --                    | 0.037  | --    | --    | --    |
| S-58, Decorator Oven #32, Line 3              | --                    | 0.091  | --    | --    | --    |

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| Source Number/Description                             | Emissions (tons/year) |               |             |             |             |
|---|-----------------------|---------------|-------------|-------------|-------------|
|   | PM10                  | VOC           | NOx         | SO2         | CO          |
| S-58, Decorator Oven #32, Line 3 – fuel combustion    | 0.021                 | 0.040         | 0.977       | 0.004       | 0.244       |
| S-60, Printer #32 with Overvarnish, Line 3            | --                    | 5.694         | --          | --          | --          |
| S-61, Internal Coating Oven, Line 3                   | --                    | 1.003         | --          | --          | --          |
| S-61, Internal Coating Oven, Line 3 – fuel combustion | 0.027                 | 0.051         | 1.256       | 0.005       | 0.314       |
| S-62, Bottom Coater, Line 1                           | --                    | 1.624         | --          | --          | --          |
| S-63, Interior Coating Storage Tank T1                | --                    | 0.128         | --          | --          | --          |
| S-64, Interior Coating Storage Tank T2                | --                    | 0.128         | --          | --          | --          |
| S-65, Emergency Standby Generator #1                  | 0.000                 | 0.012         | 0.030       | 0.000       | 0.004       |
| S-66, Emergency Standby Generator #2                  | 0.000                 | 0.012         | 0.030       | 0.000       | 0.004       |
| S-67, Videojet Printer                                |                       | 0.000         |             |             |             |
| S-68, Ink Dot System, Line 3                          | --                    | 0.128         | --          | --          | --          |
| S-69, Ink Dot System                                  | --                    | 0.256         | --          | --          | --          |
| A-5, Regenerative Thermal Oxidizer                    | 0.023                 | 0.044         | 1.074       | 0.004       | 0.268       |
| <b>Total Facility Emissions</b>                       | <b>0.32</b>           | <b>178.09</b> | <b>7.74</b> | <b>0.03</b> | <b>1.83</b> |

The emissions in Tables 1 and 2 above are the emission estimates generated by the District's database from the coating, solvent, and fuel usages reported by BMBC. For the calculation of VOC emissions from coating application, the reported coating usages are combined with the coating formulations stored for the limited classes of materials in the District's database for this facility. Since BMBC maintains detailed records of every material formulation used at the facility, in order to demonstrate compliance with the synthetic minor condition #21993 discussed in more detail below, the facility's emission calculations are more precise than the emissions calculated by the District's database. The facility has indicated that their more detailed organic emission estimates from the coating and clean-up operations for the year ending March 2013 are approximately one-fourth the level calculated by the District's database. BMBC plans to submit revised coating formulations this year to update the District's database so the District's emission inventory can more accurately estimate emissions from the facility.

#### Permitted Emission Changes Since the Last Permit Renewal

Since the Major Facility Review/Title V Permit was renewed in 2006, the District processed the following New Source Review (NSR) permit applications for BMBC:

- AN 16426 S-70, Fire Pump: Authority to Construct issued 8/14/2007. Permit to Operate issued 8/28/07.
- AN 21856 Replace Bottom Rim Coaters S-62, S-52, S-55, S-58 with 3 UV-style bottom coaters and an electrically-powered UV Curing Oven: Deemed exempt per Regulations 2-1-119.1 and 2-1-119.4 on 6/16/2010.
- AN 24253 Replacement of Natural Gas Boilers: Deemed exempt 3/27/2012.
- AN 24281 Can Washer installation: Deemed exempt 5/31/2012.

All of the changes associated with these permit actions have been incorporated into this proposed Title V/Major Facility Review permit renewal.



The emission changes due to these NSR permit applications have been summarized in Table 3 below:

**Table 3**  
**Site #A0148, Ball Metal Beverage Container, Corp.**  
**Permitted Emission Increases (tpy) Since 2006 Title V Permit Renewal**

| <b>Application</b> | <b>POC</b> | <b>NO<sub>x</sub></b> | <b>SO<sub>2</sub></b> | <b>CO</b> | <b>PM<sub>10</sub></b> |
|--------------------|------------|-----------------------|-----------------------|-----------|------------------------|
| 16426              | 0.0015     | 0.0552                | 0.0001                | 0.0068    | 0.0016                 |
| 21856              | None       | None                  | None                  | None      | None                   |
| 24253              | None       | None                  | None                  | None      | None                   |
| 24281              | None       | None                  | None                  | None      | None                   |

Since the total emission increases from the applications that have been permitted since the last Title V permit renewal are significantly less than 1 ton per year on a per pollutant basis, the District concludes there has been no significant increase or change in the permitted pollutant levels at BMBC since the Title V Permit was last renewed.

## **C. PERMIT CONTENT**

The legal and factual basis for the permit follows. The permit sections are described in the order that they are presented in the permit.

### **I. Standard Conditions**

This section contains administrative requirements and conditions that apply to all facilities. If the Title IV (Acid Rain) requirements for certain fossil-fuel fired electrical generating facilities or the accidental release (40 CFR § 68) programs apply, the section will contain a standard condition pertaining to these programs. Many of these conditions derive from 40 CFR § 70.6, Permit Content, which dictates certain standard conditions that must be placed in the permit. The language that the District has developed for many of these requirements has been adopted into the BAAQMD Manual of Procedures, Volume II, Part 3, Section 4, and therefore must appear in the permit.

The standard conditions also contain references to BAAQMD Regulation 1 and Regulation 2. These are the District's General Provisions and Permitting rules.

#### Changes to the Permit, Section I:

- The dates of adoption and approval of rules in Standard Condition 1.A have been updated. In addition, Regulation 2, Rule 5 and the SIP version of Regulation 2, Rule 6 have been added.
- The applicable dates in Standard Condition I.B.1 will be updated to reflect the issuance date of the renewal permit.
- Regulation citations have been clarified in Condition I.B(1 and 11) and I.F.
- Some editorial changes have been made to the language in Condition I.F, I.H.3, and reference to District-generated compliance certification forms was removed from Condition I.G.

- The new Standard Condition I.J has been added.

## **II. Equipment**

This section of the permit lists all permitted or significant sources. Each source is identified by an S and a number (e.g., S-1). Permitted sources are those sources that require a BAAQMD operating permit pursuant to BAAQMD Regulation 2-1-302. Each of the permitted sources has previously been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. These permits are issued in accordance with state law and the District's regulations.

The permitted sources are listed in Table II-A. The capacities in the permitted sources table are the maximum allowable capacities for each source, pursuant to Standard Condition I.J and Regulation 2-1-403.

Significant sources are those sources that have a potential to emit of more than 2 tons of a "regulated air pollutant," as defined in BAAQMD Regulation 2-6-222, per year or 400 pounds of a "hazardous air pollutant," as defined in BAAQMD Regulation 2-6-210, per year. Two significant sources have been reported at this facility – natural gas boilers, rated at 6 MM BTU/hour each. These significant sources have been included in a new Table II-C.

All abatement (control) devices that control permitted or significant sources are listed. Each abatement device whose primary function is to reduce emissions is identified by an A and a number (e.g., A-3). If a source is also an abatement device, such as when an engine controls VOC emissions, it will be listed in the abatement device table but will have an "S" number. An abatement device may also be a source (such as a thermal oxidizer that burns fuel) of secondary emissions. If the primary function of a device is to control emissions, it is considered an abatement (or "A") device. If the primary function of a device is a non-control function, the device is considered to be a source (or "S").

The equipment section is considered to be part of the facility description. It contains information that is necessary for applicability determinations, such as fuel types, contents or sizes of tanks, etc. This information is part of the factual basis of the permit.

### Changes to the Permit, Section II:

- The format of the section has been updated.
- Additional descriptive information has been added or corrected for some sources.
- S-67 was deleted from Table II A since it has been removed from service.
- S-70 was permitted since the last permit renewal and has been added to Table II A.
- SIP Regulation 6 has been added to Table II-B and the pressure drop monitoring requirements in Permit Condition #16289.
- The requirements for A-5 in Table II-B have been expanded and clarified to indicate that use of A-5 is only required by District Regulation 8, Rule 11 and/or 40 CFR Part 60, Subpart WW if non-compliant coatings are applied, and that the A-5 operating parameters are those from a source/performance test that demonstrate the emissions from

application of non-compliant coatings are controlled to the same level as if only compliant coatings were applied.

- The requirements for A-5 in Table II-B associated with Permit Condition #9904 have been expanded and corrected.
- Table II-C has been added for significant sources.

### III. Generally Applicable Requirements

This section of the permit lists requirements that generally apply to all sources at a facility including insignificant sources and portable equipment that may not require a District permit. If a generally applicable requirement applies specifically to a source that is permitted or significant, the standard will also appear in Section IV and the monitoring for that requirement will appear in Sections IV and VII of the permit. Parts of this section apply to all facilities (e.g., particulate, architectural coating, odorous substance, and sandblasting standards). In addition, standards that apply to insignificant or unpermitted sources at a facility (e.g., refrigeration units that use more than 50 pounds of an ozone-depleting compound) are placed in this section.

Unpermitted sources are exempt from normal District permits pursuant to an exemption in BAAQMD Regulation 2, Rule 1. Unpermitted sources may, however, be specifically described in a Title V permit if they are considered *significant sources* pursuant to the definition in BAAQMD Rule 2-6-239. This facility has reported operation of significant sources, that are exempt from District permit requirements. These significant sources have been included in the permit.

#### Changes to Permit, Section III:

- Editorial corrections were made to the introduction in this section.
- The dates of adoption or approval of the rules and their “federal enforceability” status have been updated.
- The table was re-ordered so BAAQMD regulations and SIP versions of those regulations are cited consecutively.
- The following rules and standards have been added to conform to current practice:
  - BAAQMD Regulation 2, Rule 1, Permits – General Requirements
  - SIP Regulation 2-1-429, Federal Emissions Statement
  - BAAQMD Regulation 6, Particulate Matter and Visible Emissions has been renamed and renumbered as Regulation 6, Rule 1, Particulate Matter - General Requirements
  - SIP Regulation 6, Particulate Matter and Visible Emissions
  - SIP Regulation 8, Rule 2, Organic Compounds – Miscellaneous Operations
  - SIP Regulation 8, Rule 3, Organic Compounds – Architectural Coatings
  - BAAQMD and SIP Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids
  - BAAQMD Regulation 8, Rule 15, Organic Compounds, Emulsified and Liquid Asphalts
  - BAAQMD Regulation 8, Rule 16, Organic Compounds, Solvent Cleaning Operations

- SIP Regulation 8, Rule 40, Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks
- SIP Regulation 8, Rule 47, Organic Compounds – Air Stripping and Soil Vapor Extraction Operations
- BAAQMD and SIP Regulations 8, Rule 51, Organic Compounds – Adhesive and Sealant Products
- BAAQMD Regulation 9, Rule 2, Inorganic Gaseous Pollutants – Hydrogen Sulfide
- BAAQMD and SIP Regulations 11, Rule 1 – Hazardous Pollutants, Lead
- BAAQMD Regulation 11, Rule 14 – Hazardous Pollutants, Asbestos Containing Serpentine
- California Health and Safety Code Section 41750, Portable Equipment
- California Health and Safety Code Section 44300, Air Toxics “Hot Spots” Information and Assessment Act of 1987
- California Code of Regulations Title 17, Section 93105, Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining
- California Code of Regulations Title 17, Section 93106, Asbestos Airborne Toxic Control Measure for Asbestos-Containing Serpentine
- California Code of Regulations Title 17, Section 93116, Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 hp
- 40 CFR Part 61, Subpart A, National Emission Standards for Hazardous Air Pollutants – General Provisions
- 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos

#### **IV. Source-Specific Applicable Requirements**

This section of the permit lists the applicable requirements that apply to permitted or significant sources. These applicable requirements are contained in tables that pertain to one or more sources that have the same requirements. The order of the requirements is:

- District Rules and Regulations
- SIP Rules (if any) are listed following the corresponding District regulations. SIP rules are District regulations that have been approved by EPA for inclusion in the California State Implementation Plan. SIP rules are “federally enforceable” and a “Y” (yes) indication will appear in the “Federally Enforceable” column. If the SIP rule is the current District rule, separate citation of the SIP rule is not necessary and the “Federally Enforceable” column will have a “Y” for “yes.” If the SIP rule is not the current District rule, the SIP rule or the necessary portion of the SIP rule is cited separately after the District rule. The SIP portion is federally enforceable; the non-SIP version is not federally enforceable, unless EPA has approved it through another program.
- Other District requirements, such as the Manual of Procedures, as appropriate.
- Federal and state requirements (other than SIP provisions)
- BAAQMD permit conditions. The text of BAAQMD permit conditions is found in Section VI of the permit.
- Federal permit conditions. The text of Federal permit conditions, if any, is found in Section VI of the permit.

Section IV of the permit contains citations of all of the applicable requirements that apply to each permitted and significant source at the facility. The text of the requirements is found in the regulations, which are readily available on the District's or EPA's websites, or in the permit conditions, which are found in Section VI of the permit. All monitoring requirements are cited in Section IV. Section VII is a cross-reference between the limits and monitoring requirements. A discussion of monitoring is included in Section C.VII of this permit evaluation/statement of basis.

### Complex Applicability Determinations

#### Applicability of 40 CFR, Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

The federal new source performance standards (NSPS) are codified in 40 CFR Part 60. Subpart Dc contains the Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. This regulation applies to steam generating units for which construction, reconstruction, or modification was commenced after June 9, 1989, which have a maximum design heat input capacity of 29 megawatts (100 million Btu per hour) or less, but greater than or equal to 2.9 megawatts (10 million Btu per hour). There are two natural gas-fired boilers at this facility that are being added to this permit as significant sources, S-71 and S-72. Each has a maximum design heat input capacity of 6 million Btu per hour, which is less than the 10 million Btu per hour applicability requirement. Therefore this rule does not apply to S-71 and S-72.

#### Applicability of 40 CFR, Part 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984

40 CFR Part 60, Subpart Kb contains the Standards of Performance for Volatile Organic Liquid Storage Vessels. This regulation applies to storage vessels with a capacity greater than or equal to 75 cubic meters that is used to store volatile organic liquids for which construction, reconstruction, or modification was commenced after July 23, 1984. There are three permitted storage tanks at this facility that store volatile organic liquids, S-31, S-63, and S-64. S-31 has a storage capacity of 12,825 gallons, and S-63 and S-64 have a storage capacity of 12,200 gallons, each. Since this regulation applies to tanks with a storage capacity of 75 cubic meters (19,813 gallons) or more, and since the storage capacities of S-31, S-63, and S-64 are less than this capacity, this regulation does not apply to these tanks.

#### Applicability of 40 CFR, Part 60, Subpart WW, Standards of Performance for the Beverage Can Surface Coating Industry

40 CFR Part 60, Subpart WW contains the Standards of Performance for the Beverage Can Surface Coating Industry. This regulation applies to exterior basecoat, overvarnish, and inside spray coating operations at 2-piece beverage can surface coating lines, which were constructed, modified, or reconstructed after 11-26-1980. The "affected source" regulated by this rule is defined as surface coating operations that apply regulated coatings, including the coating application station, flash-off area, **and** curing oven. The NSPS limits VOC emissions from beverage can surface coating operations and includes monitoring, recordkeeping, and reporting provisions to demonstrate compliance with these standards.

In review of the prior Title V/Major Facility review permit during this renewal, it was found that in some cases Subpart WW had been incorrectly cited as an applicable requirement for only one component of the “coating operation.” For example, Subpart WW was included in the table for the interior coating oven S-7, but not for the interior coating spray bank S-17, the coating source associated with this curing oven. For the purposes of District permitting, the coating operation and curing oven are considered separate sources, subject to individual permits, and applicability of District regulations are considered separately. However, since the NSPS regulates the coating station **and** curing oven as a single operation, determination of applicability of the NSPS to the “coating operation” must be reviewed differently and requires consideration of permit actions affecting the coating station or the curing oven associated with that coating station and the effect of that permit action on the “coating operation” as a whole.

To determine which coating stations and curing oven **combinations** are subject to the NSPS, any change to the operation of either the coating station or curing oven must be compared to the definition of “modification” or “reconstruction” of the coating operation under 40 CFR Part 60, Subpart A. The definitions are included below:

**Modification** means any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted. (defined in Section 60.2)

**Reconstruction** means the replacement of components of an existing facility to such an extent that (1) The fixed capital cost of the new components exceeds 50% of the fixed capital cost that would be required to construct a comparable entirely new facility, and (2) It is technologically and economically feasible to meet the applicable standards set forth in this part. (defined in Section 60.15)

Note that Subpart A states that an existing “facility” upon reconstruction, becomes an affected facility, irrespective of any change in emission rate. This is unlike a modification, which requires an increase in the emission rate of the regulated air pollutant. (Use of “facility” in federal regulations is equivalent to what the District refers to as a “source.”)

It is clear that any exterior basecoat, overvarnish, or inside spray coating operation at this facility constructed after 11-26-1980 is subject to Subpart WW. However, determination whether a modification or reconstruction has occurred when one component of a “coating operation” had undergone a permit change is not as straightforward. To document the more complex applicability or non-applicability decisions for permit actions affecting either the coating source or curing oven, the dates of initial operation, the coating(s) applied or cured at the source, and District permitting actions have been summarized in Table 4 below for each potentially subject coating source and curing oven at this facility.

**Table 4**  
**Site #A0148, Ball Metal Beverage Container, Corp.**  
**NSPS Subpart WW Applicability Summary**

| Source Number/Description   | Coatings Applied or Cured | Date of Initial Operation | Permitting Actions  | Subject to NSPS? |
|---|---------------------------|---------------------------|---|------------------|
| S-4, Deco Oven, Line 1<br>(follows S-12 and S-62)                                     | Ink, Overvarnish          | 7/5/76                    | App 28367- added overvarnish capacity, 13.688 tpy increase, new PO 11/82  | Y                |
| S-5, Basecoat Oven, Line 2<br>(follows S-51)  | Exterior basecoat         | 9/9/76                    | App 28651 – added overvarnish capacity when S-5 was used w/S-13, 13.688 tpy increase, New PO 2/83. Now associated with S-51.  | Y                |
| S-6, IC Oven #1<br>(follows S-16 and S-69)  | Inside spray              | 7/5/76                    | None  | N                |
| S-7, IC Oven #2<br>(follows S-17 and S-69)  | Inside spray              | 9/9/76                    | App 10569: modification of Lines 2 & 3; 30.05 tpy increase POC, plus NOx/CO. S-7 increase 5MMBtu/hr to 10MMBtu/hr; New PO 9/94  | Y                |
| S-12, Printer #1 with Over Varnisher, Line 1<br>(curing occurs at S-4)                | Ink, Overvarnish          | 7/5/76                    | App 28367- added overvarnish capacity, 13.688 tpy increase, New PO 11/82<br>App 29377 – modify Line 3 to allow overvarnish 13.14 tpy increase; condition limits overvarnish emissions from all 3 lines.PO issued 2/4/85 | Y                |
| S-13, Printer #2 with Over Varnisher, Line 2<br>(curing occurs at S-53)               | Ink, Overvarnish          | 9/9/76                    | App 28651 – added overvarnish capacity, 13.688 tpy increase, New PO 2/83<br>App 29377 – modify Line 3 to allow overvarnish 13.14 tpy increase; condition limits overvarnish emissions from all 3 lines.PO issued 2/4/85 | Y                |
| S-16, Interior Coating Spray Bank, Line 1<br>(curing occurs at S-6)                   | Inside spray              | 7/5/76                    | App 4779 – solvent cleaning condition change, no emission increase  | N                |
| S-17, Interior Coating Spray Bank, Line 2<br>(curing occurs at S-7)                   | Inside spray              | 9/9/76                    | App 10569: modification of Lines 2 & 3; 30.05 tpy increase POC, plus NOx/CO. Reference in Condition 9904. New PO 9/94   | Y                |
| S-24, Interior Coating Spray Bank, Line 3<br>(curing occurs at S-61)                  | Inside spray              | 1978                      | App 10569: modification of Lines 2 & 3; 30.05 tpy increase POC, plus NOx/CO. Reference in Condition 9904. New PO 9/94   | Y                |
| S-27, Printer #31 with Overvarnish, Line 3<br>(curing occurs at S-56)                 | Ink, Overvarnish          | 1978                      | App 29377 – modify Line 3 to allow overvarnish 13.14 tpy increase; condition limits overvarnish emissions from all 3 lines. PO issued 2/4/85  | Y                |
| S-51, Basecoater, Line 2<br>(curing occurs at S-5)                                    | Exterior basecoat         | From 1993-97              | App 10569: modification of Lines 2 & 3; 30.05 tpy increase POC, plus NOx/CO. Reference in Condition 9904. New PO 9/94   | Y                |
| S-52, Bottom Coater, Line 2<br>(not currently in use, but curing would occur at S-53) | Overvarnish               | From 1993-97              | App 10569: modification of Lines 2 & 3; 30.05 tpy increase POC, plus NOx/CO. Reference in Condition 9904. New PO 9/94   | Y                |
| S-53, Deco Oven, Line 2<br>(follows S-13 and S-52)                                    | Ink, Overvarnish          | From 1993-97              | App 10569: modification of Lines 2 & 3; 30.05 tpy increase POC, plus NOx/CO. Reference in Condition 9904. New PO 9/94   | Y                |

Permit Evaluation and Statement of Basis: Plant No A0148, Ball Metal Beverage Container Corporation  
2400 Huntington Drive, Fairfield, CA 94533

| Source Number/Description  | Coatings Applied or Cured | Date of Initial Operation | Permitting Actions  | Subject to NSPS? |
|--|---------------------------|---------------------------|---|------------------|
| S-55, Bottom Coater #31, Line 3 (not currently in use, but curing would occur at S-56) | Overvarnish               | From 1993-97              | App 10569: modification of Lines 2 & 3; 30.05 tpy increase POC, plus NOx/CO. Reference in Condition 9904. New PO 9/94                     | Y                |
| S-56, Deco Oven #31, Line 3 (follows S-27 and S-55)                                    | Ink, Overvarnish          | From 1993-97              | App 10569: modification of Lines 2 & 3; 30.05 tpy increase POC, plus NOx/CO. Reference in Condition 9904. New PO 9/94                     | Y                |
| S-57, Bottom Coater #32, Line 3 (not currently in use, but curing would occur at S-58) | Overvarnish               | From 1993-97              | App 10569: modification of Lines 2 & 3; 30.05 tpy increase POC, plus NOx/CO. Reference in Condition 9904. New PO 9/94                     | Y                |
| S-58, Decorator Oven #32, Line 3 (follows S-60 and S-57)                               | Ink, Overvarnish          | From 1993-97              | App 10569: modification of Lines 2 & 3; 30.05 tpy increase POC, plus NOx/CO. Reference in Condition 9904. New PO 9/94                     | Y                |
| S-60, Printer #32 with Overvarnish, Line 3 (cured at S-58)                             | Ink, Overvarnish          | From 1993-97              | App 10569: modification of Lines 2 & 3; 30.05 tpy increase POC, plus NOx/CO. Reference in Condition 9904. New PO 9/94                     | Y                |
| S-61, Internal Coating Oven, Line 3 (follows S-24)                                     | Inside spray              | From 1993-97              | App 10569: modification of Lines 2 & 3; 30.05 tpy increase POC, plus NOx/CO. Reference in Condition 9904. New PO 9/94                     | Y                |
| S-62, Bottom Coater, Line 1 (not currently in use, but curing would occur at S-4)      | Overvarnish               | From 1993-97              | App 16732 – new source to replace existing bottom coater S-14; contemporaneous offsets by abatement of S-5 by RTO; POC increase; PO 12/97 | Y                |

The permit changes in Table 4 and the details of any changes in operation on the coating stations and curing ovens with respect to applicability of the NSPS to the combined coating operation are discussed below:

Coating Line 1, S-12 Printer #1 with Overvarnisher and S-4 Deco Oven: Overvarnish, which is a regulated coating under Subpart WW is applied and cured at these sources. (Ink is also applied but is not a regulated coating.) Although both sources were put into operation in 1976, prior to the effective date of the NSPS, both sources underwent a permit change in 1982 under Application #28367. Under that application, Line 1 was modified from the individual basecoat or overvarnish capability to allow dual basecoat and overvarnish capability. BMBC's application estimated that the maximum increase in VOC emissions associated with this change was 98 lbs per day. As this was a physical change of the printer and a change in the method of operation which allowed an increase in regulated emissions at the printer and oven, this change is considered a modification under the NSPS. This modification was permitted in 1982, after the effective date of the NSPS (11/26/1980). Therefore, the District has determined that the "coating operation," both sources S-12 and S-4, became subject to Subpart WW as a result of this modification, and Subparts A and WW have been added to the Section IV tables for these sources.

Coating Line 1, S-16 Interior Coating Spray Bank to S-69 Ink Dot System and S-6 IC Oven: An inside spray coating, which is a regulated coating under Subpart WW, is applied at S-16 and cured at S-6. Both sources were initially operated in 1976. S-6 has not undergone any permit



changes since that date. S-16 was included in Application #4779, which consolidated facility-wide solvent cleaning operations under a single solvent condition limit. There was no physical or operational change at S-16 as a result of this permit action, so this condition change did not constitute modification or reconstruction of S-16. Note that since S-69 applies only inks, which are not regulated under Subpart WW, this source was not included in Table 4. Since sources S-16 and S-6 were initially operated in 1976 and have not been reconstructed or modified since that date, these sources are not subject to Subpart WW.

Coating Line 2, S-51 Basecoater and S-5 Basecoat Oven: An exterior basecoat, a regulated coating, is applied and cured at these sources. S-5 was put into operation in 1976, prior to the effective date of the NSPS, but underwent a change in operation permitted in 1983 under Application #28651. Under this application, dual basecoat and overvarnish capacity was permitted for Line 2. BMBC's application for this change estimated an emission increase of approximately 100 lbs per day. At the time, S-5 was the curing oven associated with S-13, so this change in the method of operation and emission increase constituted a modification of the "coating operation," consisting of S-13 and S-5. Both S-13 and S-5 became subject to the NSPS due to this operational change. (S-13 is now associated with a different curing oven, discussed further below.)

District records show that S-51 was permitted as a new source under Application #10569. An Authority to Construct was issued to S-51 in 1993 and the Permit to Operate was issued in 1995. Based on the date of construction, S-51 was subject to the NSPS upon initial permitting. Under this application, S-5 was moved within the facility and re-tasked from a Deco Oven for Line 2 to a Basecoat Oven for Line 2, following S-51 in the coating process. S-5 was already subject to the NSPS due to the prior modification in 1983 under Application #28651 in association with S-13, and S-51 was a newly permitted source subject to the NSPS. The District has therefore concluded that the coating operation, consisting of S-5 and S-51, is subject to the NSPS, and Subparts A and WW have been added to the Section IV table for S-5.

Coating Line 2, S-13 Printer #2 with Overvarnisher and S-53 Deco Oven: Overvarnish, which is a regulated coating under Subpart WW, is applied and cured at these sources. (Ink is also applied but is not a regulated coating under the NSPS.) S-13 was put into operation in 1976, prior to the effective date of the NSPS, but under Application #28561 dual basecoat and overvarnish capacity was permitted for Line 2 (S-13 and oven S-5). BMBC's application for this change estimated an approximately 100 lbs per day emission increase associated with this change in operation. This change was permitted in 1983, after the effective date of the NSPS, and meets a definition of modification, so S-13 became subject to the NSPS due to this change when it was associated with S-5.

District records show that S-53 was permitted as a new source under Application #10569. Under this application, an Authority to Construct was issued to S-53 in 1993 and the Permit to Operate was issued in 1995. Based on the date of construction, S-53 was subject to the NSPS upon initial permitting. S-13 was already subject to the NSPS due to a modification under Application #28561 in 1983 in association with S-5, and S-53 was a newly permitted source subject to the NSPS under Application #10569 in 1993. The District has therefore concluded that the coating

operation, consisting of S-13 and S-53, is subject to the NSPS, and Subparts A and WW have been added to the Section IV table for S-13.

Coating Line 2, S-17 Interior Coating Spray Bank to S-69 Ink Dot System and S-7 IC Oven: An inside spray coating, which is a regulated coating under Subpart WW, is applied at S-17 and cured at S-7. Both sources were initially operated in 1976 but underwent changes, permitted under Application #10569 in 1993. For S-17, one additional spray gun was added to the existing bank of 5 spray guns. In Application #10569, BMBC indicated that the new gun would not “de-bottleneck” the coating line, since the maximum processing rate/capacity of the line would still be limited by the conveyor speed through the oven, S-7, which was not changed. Since the maximum processing rate at S-7 would be unchanged, there was no increase in emissions charged for the addition of the new spray gun under Application #10569.

However, in documenting the analysis of the NSPS applicability determination for this Title V permit renewal, the District has noted that there was no baseline condition limit added to the operation of S-17 to ensure that the production at this line did not increase, thereby ensuring no increase in emissions. The NSR evaluation under Application #10569 noted that addition of new spray guns at the other interior coating spray bank also permitted under that application (discussed below) would allow reduced downtime – as it would for S-17 as well. Reduction in downtime does allow an increase in production, regardless of conveyor speed, and therefore would allow an increase in emissions. The District has therefore determined that addition of a spray gun to S-17 did constitute a modification of S-17 under Application #10569 since emission limits were not added to limit the source emissions to the emission level prior to the physical change.

Also under Application #10569, an existing permitted oven, S-23, was moved and joined with S-7, increasing the oven capacity and length for this coating operation. Joining of the two ovens increased the maximum oven heat input rating from 5 MMBtu/hr (the permitted capacity of S-7) to 10 MMBtu/hr (the joint combined capacity of S-7 and S-23). Since the ovens were to be joined end to end, this did not increase the processing rate of the oven (no change in conveyor speed), just allowed additional curing duration. Although the combustion emissions from “S-7” would technically increase (due to the additional firing capability), this could also be seen as moving an existing permitted oven to a new configuration, rather than a change to S-7. Note also that these combustion emissions are not regulated under Subpart WW. Under Application #10569, these changes to S-7 were found to not constitute modification under Subpart WW. However, the NSPS was included as an applicable requirement in the previous Title V permit for S-7.

There was no cost analysis under Application #10569 to demonstrate whether the addition of a new spray gun and doubling of the oven capacity constituted a reconstruction of the “affected source” (coating applicator and curing oven), which would subject the sources to Subpart WW requirements regardless of whether there was any increase in emissions from these physical changes. Since no baseline emission limit was set for S-17, the District believes modification of the coating source was allowed, and this modification subjects both the coating source and the associated oven to the NSPS. Therefore, the District has concluded that the coating operation, consisting of S-17 and S-7, is subject to Subpart WW, and Subparts A and WW have been added

to the Section IV table for S-17. (Note that since S-69 applies only inks; which are not regulated under Subpart WW, this source is not subject to the NSPS and was not included in Table 4.)

Coating Line 3, S-27 Printer #31 with Overvarnish and S-56 Deco Oven #31: Overvarnish, which is a regulated coating under Subpart WW, is applied at S-27 and cured at S-56. (Ink is also applied, but is not a regulated coating under the NSPS.) The District data form for S-27 indicates initial operation in 1978, but BMBC indicated during development of this permit renewal that S-27 was initially operated between 1995 and 1997, after the applicability date of Subpart WW. S-56 was permitted as a new source in 1993 under Application #10569. The District data form for S-56 also indicates a date of initial operation of 1978, but BMBC indicated that this source was also initially operated between 1995 and 1997. Therefore, the District has concluded that the coating operation, consisting of sources S-27 and S-56, is subject to Subpart WW and Subparts A and WW have been added to the Section IV table for S-27.

Coating Line 3, S-60 Printer #32 with Overvarnish and S-58 Deco Oven: Overvarnish, which is a regulated coating under Subpart WW, is applied at S-60 and cured at S-58. Ink is applied but is not a regulated coating under the NSPS. Although the District data forms for these sources indicate a date of initial operation in 1978, BMBC confirmed during development of this permit renewal that both sources were initially permitted as new sources in 1993 under Application #10569, after the effective applicability date of the NSPS. BMBC has indicated that these sources were initially operated between 1993 and 1997; therefore, the coating operation, consisting of sources S-60 and S-58, is subject to Subpart WW, which was already included in the Section IV tables for these sources.

Coating Line 3, S-24 Interior Coating Spray Bank to S-68 Ink Dot System and S-61 IC Oven: An interior spray coating, which is a regulated coating under Subpart WW, is applied at S-24 and cured at S-61. S-24 was initially operated in 1978 but under Application #10569, the addition of 3-4 spray guns to the existing bank of 5 spray guns was permitted. The facility indicated that the additional guns were intended to allow more flexibility for maintenance and reduce downtime, but would not result in an increase in processing capacity or emissions. Under Application #10569, this change to S-24 was not deemed a modification of the source. However, upon review of this determination for this Title V permit renewal, the District notes that reduction in downtime does allow an increase in production capacity. As there were no permit condition limits added to S-24 to ensure no increase in production capacity and no increase in emissions, the District has concluded that modification of S-24 was allowed under Application #10569 in 1993.

S-61 was permitted as a new source under Application #10569 in 1993, after the effective date of the NSPS. S-61 replaced the then permitted S-23 oven which was moved onto Line 2 and joined as part of S-7. By date of installation and function, it meets the applicability of the NSPS. Since modification of S-24 was allowed in 1993 under Application #10569, and S-61 was a newly permitted source subject to the NSPS under the same application, the District has concluded that the coating operation, consisting of S-24 and S-61, is subject to the NSPS, and Subparts A and WW have been added to the Section IV table for S-24. Note that since S-68 applies inks only, and since inks are not regulated under Subpart WW, S-68 is not subject to this regulation and was not included in Table 4.

The Bottom Coaters, S-52, S-55, S-57, and S-62 are not currently in use, but remain permitted sources, which could be put back into service at any time. These sources were used for application of overvarnish and could be used in this manner in the future. Overvarnish is a regulated coating under Subpart WW. S-52 is part of Line 2 and if put back into service, it would be followed by the curing oven S-53. District records show S-52 and S-53 were permitted as new sources in 1993, subject to the NSPS, so the coating operation consisting of S-52 and S-53, is subject to the NSPS. Line 3 sources S-55 and S-57 were originally permitted as new sources in 1993, associated with curing ovens S-56 and S-58, respectively, under Application #10569. These sources have been subject to subpart WW since initial operation and would remain subject to the NSPS if put back into service. District records show S-62 was permitted as a new source under Application #16732 and subject to the NSPS upon initial operation, in association with S-4. The coating operation, consisting of S-62 and S-4, is subject to Subpart WW and S-62 would remain subject to Subpart WW if put back into operation.

Applicability of 40 CFR, Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

40 CFR Part 60, Subpart IIII contains the Standards of Performance for the Stationary Compression Ignition Internal Combustion Engines. This regulation applies to manufacturers, owners, and operators of stationary compression ignition internal combustion engines, meeting certain size and model year requirements. For owners/operators, this regulation applies to National Fire Protection Association certified fire pump engines which were manufactured after July 1, 2006. There is one stationary compression ignition fire pump engine operated at this facility, S-70, which was permitted since the last permit renewal. Since this engine is a 2007 model year engine it is subject to this regulation.

Applicability of 40 CFR, Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

40 CFR Part 60, Subpart JJJJ contains the Standards of Performance for the Stationary Spark Ignition Internal Combustion Engines. This regulation applies to manufacturers, owners, and operators of stationary spark ignition internal combustion engines, meeting certain size requirements, manufacture dates, and for which commencement of construction occurs after a defined date. For owners/operators, the regulation applies to only to engines for which construction commenced after June 12, 2006 and for emergency engines, only engines greater than 25 hp, which were manufactured on or after January 1, 2009. The date the construction commences is defined as the date the engine is ordered by the owner/operator. There are two stationary spark ignition emergency internal combustion engines operated at this facility, S-65 and S-66. These engines are rated at 83 and 111.5 hp, respectively, and were permitted as Loss of Exemption sources in February 2002 due to a change in District Regulation 2-1 that defined permit exemptions for combustion engines. Since S-65 and S-66 were manufactured prior to January 1, 2009 and were ordered by the owner/operator prior to June 12, 2006, this regulation does not apply to these sources.

Applicability of 40 CFR, Part 63, Subpart T, National Emission Standards for Halogenated Solvent Cleaning

40 CFR Part 63, Subpart T contains the National Emission Standards for Hazardous Air Pollutants (NESHAP) standards for Halogenated Solvent Cleaning. This regulation applies to batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machines that use any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform, or any combination of these halogenated HAP solvents, in a total concentration greater than 5% by weight. This facility operates 3 permitted cold cleaners. At the time of initial permitting of these cold cleaners, organic solvents were used in these sources, but no halogenated solvents were used. Currently either acetone (a non-precursor organic compound) or an aqueous solution containing less than 1% organics by weight is used at these sources. Since no halogenated solvents are used at these sources, this regulation does not apply.

Applicability of 40 CFR, Part 63, Subpart KKKK, National Emission Standards for Surface Coating of Metal Cans

40 CFR Part 63, Subpart KKKK contains the National Emission Standards for Hazardous Air Pollutants standards for Surface Coating of Metal Cans. Under the last permit renewal, this regulation was reviewed to determine if Ball Metal Corporation was subject to the maximum available control technology (MACT) emission control requirements in this NESHAP. The NESHAP requires MACT controls for metal can surface coating operations which are major sources for HAP, defined as follows:

*...any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate 10 tons per year (tpy) or more of any HAP or 25 tpy or more of any combination of HAPs.*

One of the most common organic compounds emitted from this facility is ethylene glycol monobutyl ether (EGBE). EGBE has been used in a variety of coating formulations, including can coatings, for more than 50 years. Based on an extensive review of ambient EGBE levels and associated health and environmental impacts, the Environmental Protection Agency (EPA) concluded that exposure from industrial sources may not reasonably be anticipated to cause human health or environmental problems, and on November 29, 2004, the chemical delisting rule for ethylene glycol butyl ether (EGBE) from the Clean Air Act list of Hazardous Air Pollutants was finalized. (See <http://www.epa.gov/airlinks/airlinks1.html>). Effective upon publication in the Federal Register, EGBE emissions were longer subject to the Maximum Achievable Control Technology (MACT) and other requirements.

When EPA delisted of EGBE from the list of HAPs in the Clean Air Act, it became possible for Ball Metal Corporation to accept HAP limits to avoid the control requirements in 40 CFR Part 63. The facility elected to apply for a synthetic minor operating permit, proposing to accept a voluntary facility wide single HAP limit of 9 TPY and combined limit of 23 TPY for any combination of HAPs. The application was approved by the District, and Condition #21993 was added to the facility's permit on January 26, 2005, limiting HAP emissions from the facility to less than the major source thresholds. The facility demonstrates compliance with the HAP emission limits by tracking actual material usages for all coatings and solvents and calculating

emissions from stored coating formulations. Since the facility has a federally enforceable permit condition limiting HAP emission to less than the major source threshold for HAPs, the facility is not a major HAP source and is not subject to 40 CFR Part 63, Subpart KKKK.

Applicability of 40 CFR, Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

40 CFR Part 63, Subpart ZZZZ contains the National Emission Standards for Hazardous Air Pollutants (HAP) standards for Stationary Reciprocating Internal Combustion Engines. This regulation regulates hazardous air pollutants emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. BMBC is not a major source of HAP emissions and is therefore an area source of HAP emissions.

For area sources of HAP emissions, a stationary RICE is defined as “existing” if construction or reconstruction commenced before June 12, 2006 and is defined as “new” if construction was commenced after this date. There are three stationary reciprocating internal combustion engines operated at this site, S-65, S-66, and S-70.

S-65 and S-66 are stationary emergency natural gas-fired engines (83 and 111.5 hp, respectively), which were permitted as Loss of Exemption sources in February 2002 due to a change in District Regulation 2-1 that defined permit exemptions for combustion engines. They meet the definition of existing engines since they were installed prior to June 12, 2006. They are subject to the requirements in this rule that apply to existing stationary spark-ignition RICE located at an area source of HAP emissions, including general operation and maintenance requirements, specific maintenance deadlines for oil and filter, belt and hose, and spark plug inspections and changes, as well as hourly limitations which are monitored through required operation of a non-resettable hour meter. Note that this federal rule allows unlimited operation of these engines during emergencies, as does District’s Regulation 9, Rule 8. However, Subpart ZZZZ also allows use of these engines for more hours than District Regulation 9, Rule 8 and for reasons that are not allowed by District regulation. The engines must comply with the most stringent standards, but both standards apply and are included in the proposed permit. The applicable sections of 40 CFR Part 60, Subpart A, summarized in Table 8 of this regulation have also been included for these sources.

S-70 is a stationary emergency diesel-fired 2007 model year fire pump engine, 210 hp, and is considered a new engine under this regulation. Section 63.6590(c)(1) specifies that new or reconstructed stationary RICE located at an area source must meet the requirements of this part by meeting the requirements of 40 CFR Part 60, Subpart IIII (for compression ignition engines) or Subpart JJJJ (for spark ignition engines) and that no further requirements apply to such engines under this part. Since S-70 is a new stationary compression ignition RICE located at an area source, it is therefore subject to 40 CFR Part 60, Subpart IIII, which was discussed above. No requirements of this regulation apply to S-70.

Applicability of 40 CFR, Part 63, Subpart JJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

40 CFR Part 63 contains the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers. This regulation applies to industrial,

commercial, and institutional boilers located at an area source of HAP emissions. BMBC is an area source of HAP emissions and operates 2 natural-gas fired boilers, S-71 and S-72, which are exempt from District permit requirements but which are being added to this permit as significant sources. Section 63.11195 defines the types of boilers that are not subject to this subpart. Section 63.11195(e) exempts gas-fired boilers from this rule. A gas-fired boiler is defined as any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel, which does not exceed a combined total of 48 hours in a calendar year. Since S-71 and S-72 burn only natural gas not combined with solid or liquid fuels, and LPG only during periods of natural gas curtailment, these sources are exempt from this regulation.

#### Applicability of 40 CFR Part 64, Compliance Assurance Monitoring

Sources at Title V facilities may be subject to the Compliance Assurance Monitoring (CAM) requirements in 40 CFR, Part 64. Three criteria specified in 40 CFR Part 64.2(a)(1-3) must be met for CAM to apply:

1. The source must be subject to a federally enforceable emission limit for a regulated air pollutant, other than an exempt limitation.
2. The source must use a control device to achieve compliance with this emission limitation.
3. The pre-controlled emissions of the specific pollutant being controlled must be greater than the major facility emissions threshold for that pollutant.

The District reviewed applicability of the Compliance Assurance Monitoring (CAM) requirements in 40 CFR, Part 64 for this facility during the previous renewal of the Title V/Major Facility review permit. CAM was reviewed because the facility uses an emission control device to achieve compliance with a federally enforceable emission limit. The control device A-5, Regenerative Thermal Oxidizer is used to abate the fraction of the VOC emissions from the coatings that flash off at the curing ovens. The RTO is subject to the abatement requirements in the permit conditions, which were added to enforce the offset provisions that were added at the time several new coating operations were permitted.

The prior Statement of Basis for the last Title V/ Major Facility Review permit renewal indicated that the RTO is also subject to the requirements of Regulation 8, Rule 11, Section 302 (90% by weight minimum abatement efficiency of VOC) and 40 CFR Part 60, Subpart WW. Currently, the facility has indicated that only compliant coatings under Regulation 8, Rule 11 and Subpart WW are being applied, therefore the RTO is not required to maintain compliance with these regulations. However, if the facility chooses to apply non-compliant coatings at some point in the future, the abatement of the excess emissions at the RTO would be considered under these regulations. Therefore to maintain this operational flexibility, the abatement provisions in District Regulation 8, Rule 11 and 40 CFR Part 60, Subpart WW will be retained in the permit.

As a result of the CAM review during issuance of the prior Title V/Major Facility Review permit renewal, the following additional monitoring provisions were added to the permit to monitor proper operation of the RTO (see Condition #9904, Parts 1, 1a, 2, 3):

- RTO minimum operating temperature of 1,400 degrees F.
- Oven dampers are closed (directed to the RTO) while cans are being printed and coated.
- Minimum 1.5 inches of water vacuum at the inlet manifold box to the RTO

- Recordkeeping: Twenty-second samples are averaged and recorded every 15 minutes.

Since operation of the can coating lines and the RTO have not changed since these additional monitoring provisions were added during the last permit renewal, no additional monitoring under CAM is being proposed with this renewal.

S-70, Fire Pump: This is the only new source being added to the Major Facility Review/Title V permit under this proposed permit renewal. The federally enforceable emission limits associated with this source include limits in District regulations for PM, NO<sub>x</sub>, CO, and SO<sub>2</sub>. Since the emissions from this source are not controlled through use of an abatement device and are less than the major source threshold, the second and third CAM applicability criteria do not apply. Since S-70 does not meet the second or the third CAM applicability criteria - 40 CFR Part 64.2(a)(2 and 3), this source is not subject to CAM.

Changes to the Permit, Section IV:

- Abatement devices have been noted in table headings for abated sources.
- Identification of fuel combustion has been noted in table headings for sources that burn fuel. Other source descriptions have been added where the information affects applicable requirements.
- The dates of adoption or approval of the rules and their “federal enforceability” status have been updated.
- The parametric monitoring requirements in BAAQMD and SIP Regulation 1, Section 523 have been added to the tables for sources abated by the Regenerative Thermal Oxidizer or by baghouses, which are subject to temperature and pressure drop monitoring, respectively.
- Regulation 6 citations have been updated to the new numbering and name (now BAAQMD Regulation 6, Rule 1). A SIP citation of Regulation 6 has been added since the current District rule has been renumbered. Note that the standards are the same in both versions.
- BAAQMD Regulation 6-1, SIP Regulation 6, and BAAQMD Regulation 9-1 have been added to the tables for sources that burn fuel.
- BAAQMD Regulation 6-1 and SIP Regulation 6 have been added to the tables for the interior spray coating operations.
- BAAQMD Regulation 8-11 sections regulating VOC content of coatings have been deleted from tables for sources which are not used to apply coatings (ovens), since the District regulations consider the coating applicator and curing oven separately. However, the control device requirements that would apply if non-compliant coatings are used have been left in the oven tables, since the coating emissions that evolve from the ovens are the emissions that would be captured and abated.
- BAAQMD Regulation 8-11 abatement device requirements have been added to source tables for coating and curing operations, since BMBC may elect apply non-compliant coatings and use the RTO controls emissions to the level that would be emitted through application of complying coatings, even though the RTO is not now used to comply with the requirements of this rule (since only compliant coatings are currently being applied).
- Federal enforceability for BAAQMD Regulation 9, Rule 8 has been corrected and the SIP Regulation 9, Rule 8 citations have been added.



- NSPS, Subparts A and WW have been added to tables for sources: S-4, S-5, S-12, S-13, S-17, S-24, S-27. The VOC content limits in the NSPS have been included in the tables for both the coating applicator and associated curing oven, since the combination of coating applicator and curing oven are considered a single affected source under the NSPS. Provisions for compliance, both with or without use of an incineration control device, have been included in the tables in case BMBC elects to apply non-compliant coatings in the future.
- CAM citations have been expanded.
- The description of regulation sections have been expanded and corrected. Note that where an entire section applies, the permit cites the regulation to the section level. Where subparts of a section do not apply, the permit cites to the subsection level, excluding the subsections that do not apply.
- Monitoring requirements that apply to the RTO have been included only in the tables for sources directly abated by the RTO (curing ovens).
- References to applicable conditions have been put in numerical order, updated, and corrected if citations were missing.
- All tables that include Condition #1701 have been updated to reflect that the condition limits both POC and NPOC emissions from solvent cleaning.
- S-24: Table IV-I for S-24 has been deleted, and S-24 has been consolidated into Table IV-H with S-17.
- S-31: No table existed for this source, so a new Table IV-I has been added for this source. The tank currently stores an organic compound with a true vapor pressure of 0.32 psia, which meets the exemption in Section 8-5-117. This tank was permitted in 1987 (Application #32577), and the application file does not note the vapor pressure of the material upon which emissions were based, the District has concluded that this tank is not limited to storing low vapor pressure materials. Since the tank is not limited to storing materials with vapor pressure less than 0.5 psia, the Regulation 8, Rule 5 requirements that apply to a tank of this size if storing an organic compound with true vapor pressure greater than 0.5 psia but less than 1.5 psia have been included in this table. This tank meets these requirements, since it is equipped with a submerged fill pipe. Compounds with a true vapor pressure greater than 1.5 psia may not be stored at this tank, as the tank does not meet the requirements in Regulation 8, Rule 5 for such storage.
- S-35: Regulation 8, Rule 16 recordkeeping requirements have been added to Table IV-M. This table has been re-lettered IV-J.
- S-44, S-45, S-46: Table IV-N has been expanded to specify the solvent and control device requirements that apply to these cold cleaners and re-lettered IV-K. These cold cleaners are used for maintenance cleaning. At the time of initial permitting, organic solvents were used in these sources, but currently an aqueous solution containing less than 1% organics by weight is used at these sources. No halogenated solvents are used at these sources, so 40 CFR Part 63, Subpart T does not apply.
- S-56 and S-58: References to Permit Condition #9904, Parts 22, 23, 25 were deleted from Table IV-O. These sources are subject to the limits in Parts 26 through 31. References to missing Parts 27 and 29 were added to the table.
- S-63 and S-64: The federal enforceability of Regulation 8, Rule 5 has been updated in Table IV-U. The interior coating currently stored at these tanks has a true vapor pressure

less than 0.5psia, which meets the exemption in Section 8-5-117. When these tanks were permitted in 2002 (Application #3138), the tanks were determined to be exempt from the requirements of Regulation 8, Rule 5 based on low vapor pressure, and the emissions assessed for the tanks were based on storage of interior coating with a vapor pressure less than 0.5 psia. Therefore these tanks are not permitted to store materials with a vapor pressure in excess of 0.5 psia. The table has been re-lettered IV-R.

- S-67: Table IV-W has been deleted since S-67 was removed from service.
- S-70: A new Table IV-V has been added for S-70, which was permitted since the last permit renewal.
- S-71 and S-72: A new Table IV-W has been added for these significant sources, which were installed at the facility since the last permit renewal.
- Tables IV-D, E, F, G, M, K, O, P, Q, R, S, T, V, X, Y have been re-lettered so that they will occur in numerical source order.

## **V. Schedule of Compliance**

A schedule of compliance is required in all Title V permits pursuant to BAAQMD Regulation 2-6-409.10, which provides that a major facility review permit shall contain the following information and provisions:

“409.10 A schedule of compliance containing the following elements:

- 10.1 A statement that the facility shall continue to comply with all applicable requirements with which it is currently in compliance;
- 10.2 A statement that the facility shall meet all applicable requirements on a timely basis as requirements become effective during the permit term; and
- 10.3 If the facility is out of compliance with an applicable requirement at the time of issuance, revision, or reopening, the schedule of compliance shall contain a plan by which the facility will achieve compliance. The plan shall contain deadlines for each item in the plan. The schedule of compliance shall also contain a requirement for submission of progress reports by the facility at least every six months. The progress reports shall contain the dates by which each item in the plan was achieved and an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.”

The schedule of compliance for this permit contains the statements regarding continued compliance and timely compliance with any newly applicable requirements, as specified in Sections 2-6-409.10.1 and 2-6-409.10.2. The previous permit contained no schedule of compliance. During development of the proposed permit renewal, BMBC identified a compliance issue surrounding Permit Condition #9904. This condition requires quantification of emission reductions achieved by the Regenerative Thermal Oxidizer, which were provided to offset emission increases from permitting of new sources. The condition requires ongoing demonstration that the emission reductions achieved by the thermal oxidizer are greater than the emissions from the “new” sources that were subject to offsets.

Since one of the abated production lines was shutdown for part of the past year, the “calculated” emission reductions dropped. Since the permit condition does not account for shutdown of the abated sources in the calculation, the calculations show a seeming exceedance of the emission limits, even though the actual emission reductions due to shutdown of the operating line are a greater emission reduction than abatement of that line if operating. Resolution of this flaw in the

permit condition will require a District permit application for a change of condition, therefore a schedule of compliance for submittal of this permit application has been added to the proposed permit.

Changes to the Permit, Section V:

- A schedule of compliance has been added to the permit, requiring submittal of a District permit application for revision of Condition #9904 to account for emission reductions achieved through shutdown of operating lines.

**VI. Permit Conditions**

Each permit condition is identified with a unique numerical identifier, up to five digits. The existing permit conditions are derived from previously issued District Authorities to Construct (A/C) or Permits to Operate (P/O). Permit conditions may also be imposed or revised as part of the annual review of the facility by the District pursuant to California Health and Safety Code (H&SC) § 42301(e), through a variance pursuant to H&SC § 42350 et seq., an order of abatement pursuant to H&SC § 42450 et seq., or as an administrative revision initiated by District staff. After issuance of the Title V permit, permit conditions will be revised using the procedures in Regulation 2, Rule 6, Major Facility Review.

The regulatory basis is listed following each condition. The regulatory basis may be a rule or regulation. The District is also using the following terms for regulatory basis:

- BACT: This term is used for a condition imposed by the Air Pollution Control Officer (APCO) to ensure compliance with the Best Available Control Technology in Regulation 2-2-301.
- Cumulative Increase: This term is used for a condition imposed by the APCO that limits a source's operation to the operation described in the permit application pursuant to BAAQMD Regulation 2-1-403.
- Offsets: This term is used for a condition imposed by the APCO to ensure compliance with the use of offsets for the permitting of a source or with the banking of emissions from a source pursuant to Regulation 2, Rules 2 and 4.
- PSD: This term is used for a condition imposed by the APCO to ensure compliance with a Prevention of Significant Deterioration permit issued pursuant to Regulation 2, Rule 2.
- TRMP: This term is used for a condition imposed by the APCO to ensure compliance with limits that arise from the District's Toxic Risk Management Policy. This policy was replaced by Regulation 2, Rule 5 in 2005.

During the Title V permit development, the District has reviewed the existing permit conditions, deleted the obsolete conditions, and, as appropriate, revised the conditions for clarity and enforceability. While the District has authority to revise the existing permits, and is doing so here concomitantly with the Title V process, it also has authority to supplement the terms of existing permits through the Title V process itself. Additional monitoring has been added, where appropriate, to assure compliance with the applicable requirements.

Changes to the Permit, Section VI:

- The format of the conditions has been updated and some revisions to the condition wording have been proposed.
- Clarification has been made to the basis of some conditions.
- The order of the conditions has been revised to occur in numerical order by condition number.
- Condition #1701 applies to solvent cleaning at the coating and solvent cleaning (wipe cleaning and cold cleaners) sources at the facility.
  - This condition was added to all source tables that are subject to this condition for which the reference was previously omitted.
  - This condition was issued in 1990 (Application #4779) at the BMBC's request to consolidate all solvent cleaning (wipe cleaning and solvent usage at cold cleaners) under a single emission limit to simplify monitoring and recordkeeping of solvent usage at the facility. At that time, the facility was using 2 types of precursor organic solvents in the cold cleaners and for wipe cleaning. Since issuance of this combined permit condition which limits POC emissions from solvent clean-up usage, the facility has switched to acetone for solvent cleaning. Acetone was deemed a non-precursor organic compound in June, 1995. Since the condition limiting precursor organic compound emissions did allow use of acetone at the time of issuance, but acetone has since been designated a non-precursor organic compound, the condition is being revised to clarify that the limit applies to both precursor and non-precursor organic compounds.
  - Also review of Application #16732 for source S-62 has shown that the solvent cleanup associated with S-62 was intended to be included in the Condition #1701 limit. Reference to S-62 has been added to Condition #1701 to correct this omission.
- Condition #9904 has been added to the source tables for sources subject to the condition to correct previous omissions.
  - A record retention requirement has been added to Part 2.
  - Recordkeeping for A-5 downtime has been consolidated from throughout other parts of Condition #9904 to Part 3 and the requirement to maintain a 12-month running total of the hours of downtime has been made explicit.
  - Part 7 has been updated to clarify that non-operation of A-5 due to maintenance should not occur on a day that a District has called a summer time Spare the Air day for ozone. Since original issuance of this condition, the District has also added Spare the Air days in the winter season due to projected exceedance of particulate matter standards. The permit condition is being clarified to reflect that non-operation of A-5 is of concern with respect to summer-time ozone exceedances, not winter-time particulate matter exceedances.
- Condition #14836, Part 3 has been deleted since it is redundant. The same requirement is found in Condition # 9904, Part 7.
- Condition #16289 has been revised to include S-24, since Condition # 16291 for S-24 contains exactly the same requirements. Condition #16291 will be deleted. This consolidation also allows the tables for S-24 and S-17 in Section IV to be consolidated.

- Condition #18644 has been deleted since it applied to S-67, which has been removed from service.
- Condition #18645 was included twice in the permit, so the duplicate has been deleted.
- Condition #18729 has been updated with the new Regulation 9, Rule 8 limits on discretionary operation that became effective January 1, 2012.
- Condition #21993, which is a facility wide condition, was added to all source tables to correct previous omissions.
- Condition #22850, which applies to S-70, which was permitted under NSR permit application #16426 since the last permit renewal, has been added. Since the condition originally issued with the NSR permit did not contain the correct discretionary limits for fire pump engines, Part 1 of the condition and basis citations will be revised to the operational limits for fire pump engines through this permit renewal. The condition issued with the NSR permit is shown in underline format and the parts of that condition being deleted are also shown with strikeout formatting. The corrections proposed are shown in double underline formatting.

All changes to existing permit conditions are clearly shown in “strike-out/underline” format in the proposed permit. When the permit is issued, all ‘strike-out’ language will be deleted; all “underline” language will be retained.

## **VII. Applicable Limits and Compliance Monitoring Requirements**

This section of the permit is a summary of numerical limits and related monitoring requirements for each source. The summary includes a citation for each monitoring requirement, frequency of monitoring, and type of monitoring. The applicable requirements for monitoring are contained in Sections IV, Source-Specific Applicable Requirements, and VI, Permit Conditions, of the permit.

Monitoring decisions are typically the result of a balancing of several different factors including: 1) the likelihood of a violation given the characteristics of normal operation, 2) the degree of variability in the operation and in the control device, if there is one, 3) the potential severity of impact of an undetected violation, 4) the technical feasibility and probative value of indicator monitoring, 5) the economic feasibility of indicator monitoring, and 6) some other factor, such as a different regulatory restriction applicable to the same operation, that also provides some assurance of compliance with the limit in question.

These factors are the same as those historically applied by the District in developing monitoring for applicable requirements. It follows that, although Title V calls for a re-examination of all monitoring, there is a presumption that these factors have been appropriately balanced and incorporated in the District’s prior rule development and/or permit issuance. When a rule or permit requirement has historically had no monitoring associated with it, no monitoring may still be appropriate in the Title V permit if, for instance, there is little likelihood of a violation. Compliance behavior and associated costs of compliance are determined in part by the frequency and nature of associated monitoring requirements. As a result, the District will generally revise the nature or frequency of monitoring only when it can support a conclusion that existing monitoring is inadequate.

The tables below list only the emission limits for which there is no monitoring in the applicable requirements. For each emission limit without corresponding monitoring, the analysis of the individual source compliance status has been documented. If a determination of inadequate monitoring was found, additional monitoring would be proposed through this permit renewal. However, in the cases identified below, no additional monitoring is being recommended for the reasons identified. The District has examined the monitoring for all other emission limits and has determined that monitoring is adequate to provide a reasonable assurance of compliance.

**Table 5**  
**SO<sub>2</sub> Emission Limits with No Associated Monitoring**  
**Site #A0148, Ball Metal Beverage Container Corp.**

| S# & Description  | Emission Limit Citation | Federally Enforceable Emission Limit   | Monitoring |
|---|-------------------------|--|------------|
| Natural Gas-Fired Sources:<br>S-4, S-5, S-6, S-7, S-53,<br>S-56, S-58, S-61, Curing<br>Ovens;<br>S-65, S-66, Emergency<br>Generators;<br>S-71, S-72, Exempt<br>Boilers;<br>A-5, Regenerative Thermal<br>Oxidizer<br>Diesel-Fired Source:<br>S-70, Emergency Fire<br>Pump Engine | BAAQMD 9-1-301          | Ground level concentrations of SO <sub>2</sub> shall not<br>exceed: 0.5 ppm for 3 consecutive minutes<br>AND 0.25 ppm averaged over 60<br>consecutive minutes AND 0.05 ppm<br>averaged over 24 hours | N/A        |
| Natural Gas-Fired Sources:<br>S-4, S-5, S-6, S-7, S-53,<br>S-56, S-58, S-61, Curing<br>Ovens;<br>S-65, S-66, Emergency<br>Generators;<br>S-71, S-72, Exempt<br>Boilers;<br>A-5, Regenerative Thermal<br>Oxidizer  | BAAQMD 9-1-302          | 300 ppm (dry)  | N/A        |

### SO<sub>2</sub> Monitoring:

Burning of fuel that contains sulfur compounds will result in emissions of sulfur dioxide (SO<sub>2</sub>) as a product of that combustion. Both the natural gas burned at the curing ovens, emergency engine-generators, exempt boilers, and Regenerative Thermal Oxidizer, as well as the diesel fuel burned at the emergency fire pump engine, at this facility contain low levels of sulfur compounds, which will contribute to ground level concentrations of SO<sub>2</sub>. All facility combustion sources are subject to the SO<sub>2</sub> emission limitations in District Regulation 9, Rule 1 (ground-level concentration and stack concentration).

Area monitoring to demonstrate compliance with the ground level SO<sub>2</sub> concentration limitations of Regulation 9-1-301 is required at the discretion of the APCO (per BAAQMD Regulation 9-1-501). Since the ground level monitoring is expensive, such monitoring is not required if the expected levels of SO<sub>2</sub> emissions are low, resulting in a large expected margin of compliance with the emission limit. This facility does not have equipment that emits large amounts of SO<sub>2</sub>. Therefore, the APCO has not required the facility to perform ground level monitoring.

In EPA's June 24, 1999 agreement with CAPCOA and ARB, "Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP", EPA has agreed that monitoring of natural-gas-fired combustion sources is not needed to verify compliance with Regulation 9, Rule 1, since violations of the regulation are unlikely. Therefore, no monitoring of has been deemed necessary for the emission limits in Regulations 9-1-301 and 9-1-302 for the natural gas-fired sources.

**Table 6**  
**PM Emission Limits with No Associated Monitoring**  
**Site #A0148, Ball Metal Beverage Container Corp.**

| <b>S# &amp; Description</b>  | <b>Emission Limit Citation</b>  | <b>Federally Enforceable Emission Limit</b> | <b>Monitoring</b> |
|--|---|---|-------------------|
| Natural Gas-Fired Sources:<br>S-4, S-5, S-6, S-7, S-53,<br>S-56, S-58, S-61, Curing<br>Ovens;<br>S-65, S-66, Emergency<br>Generators; S-71, S-72,<br>Exempt Boilers;<br>A-5, Regenerative Thermal<br>Oxidizer<br>Diesel-Fired Source:<br>S-70, Emergency Fire Pump<br>Engine | BAAQMD 6-1-301 and<br>SIP 6-301   | Ringelmann 1.0                              | None              |
| Natural Gas-Fired Sources:<br>S-4, S-5, S-6, S-7, S-53,<br>S-56, S-58, S-61, Curing<br>Ovens;<br>S-65, S-66, Emergency<br>Generators; S-71, S-72,<br>Exempt Boilers;<br>A-5, Regenerative Thermal<br>Oxidizer<br>Diesel-Fired Source:<br>S-70, Emergency Fire Pump<br>Engine | BAAQMD 6-1-310 and<br>SIP 6-310   | ≤0.15 grains/dscf                           | None              |
| S-70, Emergency Fire Pump<br>Engine  | CCR Title 17, Section<br>93115.6(a)<br>(4)(A)(1)(a) and<br>40 CFR Part 60.4205(c) | 0.40 grams per bhp-hr                       | None              |

## **PM Monitoring:**

### **Visible Emissions**

BAAQMD Regulation 6-1-301 and SIP Regulation 6-301 limit visible emissions to no darker than 1.0 on the Ringelmann Chart (except for periods or aggregate periods less than 3 minutes in any hour). Visible emissions are normally not associated with combustion of gaseous fuels, such as natural gas. In accordance with EPA's June 24, 1999 agreement with CAPCOA and ARB titled "Summary of Periodic Monitoring Recommendations for Generally Applicable Requirements," no monitoring is required of natural gas combustion sources to assure compliance with the visible emission limit in these regulations. This document also states that no opacity monitoring is required for diesel standby and emergency reciprocating engines. Therefore no monitoring is proposed for the natural gas-fired curing ovens, emergency engine-generators, exempt boilers, and Regenerative Thermal Oxidizer and no monitoring is proposed for the diesel-fired emergency fire pump engine.

### **Filterable Particulate Stack Emissions**

BAAQMD Regulation 6-1-310 and SIP Regulation 6-310 limit filterable particulate (FP) emissions from any source to 0.15 grains per dry standard cubic foot (gr/dscf) of exhaust volume. In accordance with the July 2001 "CAPCOA/CARB/EPA Region IX Recommended Periodic Monitoring for Generally Applicable Grain Loading Standards in the SIP: Combustion Sources," a facility is not required to monitor the engine exhaust from non-utility distillate-oil-fueled emergency piston-type IC engines, but the facility must maintain records of all engine usage. S-70, is a non-utility emergency engine which burns diesel fuel, so no monitoring is required for the PM limits in Regulation 6-1-301 and SIP 6-301. However, the facility is required to keep records of the engine usage. No further monitoring is recommended.

### **Diesel PM Emissions**

The California Code of Regulations, Title 17, Section 93115, California Airborne Toxic Control Measure for Stationary Compression Ignition Engines specifies PM emission standards for subject engines based on output rating and model year. 40 CFR Part 60, Subpart IIII also specifies emission standards for stationary internal compression engines. S-70 is a compression ignition engine subject to both regulations. It is a model year 2007 engine, subject to the Tier 2 standards for fire pump engines in CCR Title 17 Section 93115.6(a)(4)(A)(1)(a), which is the same standard as specified in 40 CFR Part 60.4205(c). CCR Title 17 Section 93115.13 and 40 CFR Part 60.4211(b)(3) specify engine manufacture test data as a valid method for demonstrating compliance with this emission standard. Since the manufacturer's test data shows compliance with the Tier 2 emission standards, no monitoring has been required for this emission limit.



**Table 7**  
**NMHC, NO<sub>x</sub>, CO Emission Limits with No Associated Monitoring**  
**Site #A0148, Ball Metal Beverage Container Corp.**

| <b>S# &amp; Description</b>      | <b>Emission Limit Citation</b>  | <b>Federally Enforceable Emission Limit</b>                          | <b>Monitoring</b> |
|----------------------------------|---|--|-------------------|
| S-70, Emergency Fire Pump Engine | CCR Title 17, Section 93115.6(a)(4)(A)(1)(a) and 40 CFR Part 60.4205(c) | 7.8 grams NMHC+NO <sub>x</sub> per bhp-hr<br>2.6 grams CO per bhp-hr | None              |

**NMHC + NO<sub>x</sub>, CO Monitoring:**

The California Code of Regulations, Title 17, Section 93115, California Airborne Toxic Control Measure for Stationary Compression Ignition Engines and 40 CFR Part 60, Subpart IIII specify a combined non-methane hydrocarbon and NO<sub>x</sub> emission standard, as well as a CO emission standard, for subject engines based on output rating and model year. S-70 is a compression ignition engine subject to these regulations. It is a model year 2007 engine, subject to the Tier 2 standards for fire pump engines in Section 93115.6(a)(4)(A)(1)(a), which are the same standards as specified in 40 CFR Part 60.4205(c). CCR Title 17 Section 93115.13 and 40 CFR Part 60.4211(b)(3) specify engine manufacture test data as a valid method for demonstrating compliance with this emission standard. Since the manufacturer's test data shows compliance with the NMHC+NO<sub>x</sub> and CO Tier 2 emission standards, no monitoring has been proposed for these emission standards.

Changes to the Permit, Section VII:

- Editorial corrections were made to the introduction in this section.
- Identification of fuel combustion has been noted in table headings for sources that burn fuel. Other source descriptions have been added where the information affects applicable requirements.
- Abatement devices have been noted in table headings for abated sources.
- The references to regulations and their "federal enforceability" status have been updated.
- The parametric monitoring requirements in BAAQMD Regulation 1, Section 523 have been added to the tables for sources abated by the Regenerative Thermal Oxidizer and sources abated by baghouses.
- Regulation 6 citations have been updated to the new numbering and name (now BAAQMD Regulation 6, Rule 1). A SIP citation of Regulation 6 has been added since the current District rule has been renumbered. Note that the standards are the same in both versions.
- BAAQMD Regulation 6-1, SIP Regulation 6, and BAAQMD Regulation 9-1 have been added to the tables for sources that burn fuel.
- Regulation 8-11 sections regulating VOC content of coatings have been deleted from tables for sources which are not used to apply coatings (ovens).
- Regulation 8-11 abatement device requirements have been added to source tables for coating operations, since the RTO may be used to comply with the requirements of this rule if the facility elects to apply non-compliant coatings. At this time, the facility applies only coatings that comply with the VOC content limits in this rule.

- NSPS, Subpart A and WW have been added to tables for sources: S-4, S-5, S-12, S-13, S-17, S-24, S-27.
- Missing condition citations and federal enforceability status have been added to tables.
- Condition #1701 references have been added to all coating sources and solvent cleaning sources and have been updated to reflect that this condition limits POC and NPOC emissions from solvent cleaning.
- Redundant references and citations of requirements that do not contain numerical limits have been deleted.
- Symbols ( $\leq$  or  $\geq$ , as applicable) and text have been added to tables, corrections have been made, and limits have been expanded for clarity.
- Citations of applicable requirements have been re-ordered in some tables to match the citations in Section IV tables.
- No table existed for source, S-31, so a new Table VII-I has been added for this source.
- No table existed for sources S-44, S-45, and S-46, so a new Table VII-K has been added.
- The table for S-61 was deleted and this source was added to the table VII-D with S-7 to match the Section IV table.
- Table VII-T has been deleted since S-67 was removed from service.
- A new Table VII-V has been added for source, S-70, which was permitted since the last permit renewal.
- A new Table VII-W has been added for significant sources, S-71 and S-72, which were installed since the last permit renewal.
- Tables have been re-lettered as necessary so that they will occur in numerical source order and will have the same alphabetical identification as in Section IV.

## **VIII. Test Methods**

This section of the permit lists test methods that are associated with standards in District or other rules. It is included only for reference. In most cases, the test methods in the rules are source test methods that can be used to determine compliance but are not required on an ongoing basis. They are not applicable requirements.

If a rule or permit condition requires ongoing testing, the requirement will also appear in Section IV of the permit.

### Changes to Permit, Section VIII:

- The Regulation 6, Rule 1 reference has been updated and reference to the SIP version of Regulation 6 has been added.
- Test methods for the BAAQMD and SIP Regulation 8, Rule 5 were added.
- Test methods for the BAAQMD Regulation 8, Rule 16 were added.
- Test methods for the BAAQMD Regulation 9, Rule 1 placed in numerical order.
- Test methods for the BAAQMD Regulation 9, Rule 7 were added.
- Test methods for the state Airborne Toxic Control Measure for Stationary Compression Ignition Engines were added.

## **IX. Permit Shield**

The District rules allow two types of permit shields. The permit shield types are defined as follows: (1) A provision in an MFR permit explaining that specific federally enforceable regulations and standards that are not applicable to a source or group of sources, or (2) A provision in an MFR permit explaining that specific federally enforceable applicable requirements for monitoring, recordkeeping and/or reporting are subsumed because other applicable requirements for monitoring, recordkeeping, and reporting in the permit will assure compliance with all emission limits.

The second type of permit shield is allowed by EPA's White Paper 2 for Improved Implementation of the Part 70 Operating Permits Program. The District uses the second type of permit shield for all streamlining of monitoring, record keeping, and reporting requirements in Title V permits. The District's program does not allow other types of streamlining in Title V permits.

In the prior renewal of the Title V/Major Facility Review permit for this facility, it was noted that this facility had the second type of permit shield. The District notes that since the permit shield included in the prior permit included emission limits from Subpart WW of the NSPS, this was actually a type 1 permit shield.

Ball Metal did not apply for inclusion of a permit shield in this renewal of the Title V/Major Facility Review permit, so no permit shield is proposed. Note also that as discussed in detail in Section IV of this Statement of Basis, the District has determined that many sources were incorrectly included in the permit shield in the prior permit. The proposed renewal includes Subpart WW as an applicable requirement for these sources.

### Changes to the Permit, Section IX:

- The permit shield from the prior Title V/Major Facility Review permit has been deleted.

## **X. Revision History**

This section of the permit summarizes each revision to the permit.

### Changes to the Permit, Section X:

- A Revision History was added to the permit, including the dates of issuance for the initial and first renewal of the Title V/Major Facility Review permit, and the detailed permit revisions associated with this proposed renewal.

## **XI. Glossary**

This section of the permit defines and explains acronyms, abbreviations, and other terms that are used in this permit.

### Changes to the Permit, Section XI:

- The glossary was updated by clarifying explanations and adding numerous new terms.

## **D. ALTERNATIVE OPERATING SCENARIOS**

No alternate operating scenario has been requested for this facility.

## **E. COMPLIANCE STATUS**

The responsible official for Ball Metal Beverage Container Corp. submitted a signed Certification Statement form with submittal of the application for renewal of the Title V permit, dated June 6, 2011, and an updated signed Certification Statement, dated June 9, 2014. On this form, the responsible official certified that the following four statements are true:

Based on information and belief formed after reasonable inquiry, the source(s) identified in the Applicable Requirements and Compliance Summary form that is(are) in compliance will continue to comply with the applicable requirement(s);

Based on information and belief formed after reasonable inquiry, the source(s) identified in the Applicable Requirements and Compliance Summary form will comply with future-effective applicable requirement(s), on a timely basis;

Based on information and belief formed after reasonable inquiry, information on application forms, all accompanying reports, and other required certifications is true, accurate, and complete;

All fees required by Regulation 3, including Schedule P have been paid.

In the updated certification statement on June 9, 2014, BMBC also certified the following:

Based on information and belief formed after reasonable inquiry, the source(s) identified in the Schedule of Compliance application form that is(are) not in compliance with the applicable requirement(s) will comply in accordance with the attached compliance plan schedule.

## **F. DIFFERENCES BETWEEN THE APPLICATION AND THE PROPOSED PERMIT**

The Title V permit renewal application was received on June 6, 2011. The renewal application and the previous permit are the basis for constructing the proposed Title V permit renewal. All differences between the Title V renewal application and the proposed permit have been discussed in this Statement of Basis.

The following NSR applications have been discussed in this Statement of Basis and included in the proposed renewal of the Title V Permit:

- Permit Application #16426 permitting a new fire pump, S-70, was received on July 11, 2007. The Authority to Construct was issued on August 14, 2007 and the Permit to Operate was issued on August 28, 2007. [Note: There are errors in the evaluation of this application, which are in the process of being corrected.]

- Permit Application #21856 requesting approval to replace the existing bottom rim coaters on all 3 can coating lines with UV-style bottom coaters and one electric UV-curing oven was received on April 16, 2010 and deemed exempt from District permit requirements on June 16, 2010.
- Permit Application #24253 requesting approval of to replace two 10 MMBtu per hour natural gas boilers, S-8 and S-9, with two 6 MMBtu per hour natural gas boilers, S-71 and S-72 was received on March 5, 2012. The proposed new boilers were deemed exempt from District permit requirements on March 27, 2012.
- Permit Application #24281 requesting approval to install and operate three can washing operations and associated drying ovens was received on March 12, 2012. The proposed washing operations and natural gas-fired drying ovens (all less than 10 MMBtu per hour input capacity) were deemed exempt on May 31, 2012.

## APPENDIX A

### GLOSSARY

**ACT**

Federal Clean Air Act

**AP-42**

An EPA Document “Compilation of Air Pollution Emission Factors” that is used to estimate emissions from numerous source types. It is available electronically from EPA’s web site at: <http://www.epa.gov/ttn/chief/ap42/index.html>

**APCO**

Air Pollution Control Officer: Head of Bay Area Air Quality Management District

**API**

American Petroleum Institute

**ARB**

Air Resources Board (same as CARB)

**ASTM**

American Society for Testing and Materials

**ATC**

Authority to Construct

**ATCM**

Airborne Toxic Control Measure

**BAAQMD**

Bay Area Air Quality Management District

**BACT**

Best Available Control Technology

**BARCT**

Best Available Retrofit Control Technology

**Basis**

The underlying authority that allows the District to impose requirements.

**BDT**

Best Demonstrated Technology

**C1**

An organic chemical compound with one carbon atom, for example: methane

**C3**

An organic chemical compound with three carbon atoms, for example: propane

**C5**

An Organic chemical compound with five carbon atoms

**C6**

An Organic chemical compound with six carbon atoms

**CAA**

The federal Clean Air Act

**CAAQS**

California Ambient Air Quality Standards

**CAPCOA**

California Air Pollution Control Officers Association

**CARB**

California Air Resources Board (same as ARB)

**CCR**

California Code of Regulations

**CEC**

California Energy Commission

**CEQA**

California Environmental Quality Act

**CEM**

A "continuous emission monitor" is a monitoring device that provides a continuous direct measurement of some pollutant (e.g. NO<sub>x</sub> concentration) in an exhaust stream.

**CFR**

The Code of Federal Regulations. 40 CFR contains the implementing regulations for federal environmental statutes such as the Clean Air Act. Parts 50-99 of 40 CFR contain the requirements for air pollution programs.

**CH<sub>4</sub> or CH<sub>4</sub>**

Methane

**CO**

Carbon Monoxide

**CO<sub>2</sub> or CO<sub>2</sub>**

Carbon Dioxide

**CT**

Combustion Zone Temperature

**Cumulative Increase**

The sum of permitted emissions from each new or modified source since a specified date. Used to determine whether threshold-based requirements are triggered.

**District**

The Bay Area Air Quality Management District



**dscf**

Dry Standard Cubic Feet

**dscm**

Dry Standard Cubic Meter

**E 6, E9, E12**

Very large or very small number values are commonly expressed in a form called scientific notation, which consists of a decimal part multiplied by 10 raised to some power. For example, 4.53 E 6 equals  $(4.53) \times (10^6) = (4.53) \times (10 \times 10 \times 10 \times 10 \times 10 \times 10) = 4,530,000$ . Scientific notation is used to express large or small numbers without writing out long strings of zeros.

**EG**

Emission Guidelines

**EGT**

Exhaust Gas Temperature

**EO**

Executive Order

**EPA**

The federal Environmental Protection Agency.

**Excluded**

Not subject to any District regulations.

**Federally Enforceable, FE**

All limitations and conditions which are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60, (NSPS), Part 61, (NESHAPs), Part 63 (HAP), and Part 72 (Permits Regulation, Acid Rain), including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

**FP**

Filterable Particulate as measured by BAAQMD Method ST-15, Particulate.

**FR**

Federal Register

**GDF**

Gasoline Dispensing Facility

**GLC**

Ground level concentration.

**GLM**

Ground Level Monitor

**grains**

1/7000 of a pound

**H<sub>2</sub>S or H<sub>2</sub>S**

Hydrogen Sulfide

**H&SC**

Health and Safety Code

**HAP**

Hazardous Air Pollutant. Any pollutant listed pursuant to Section 112(b) of the Act. Also refers to the program mandated by Title I, Section 112, of the Act and implemented by 40 CFR Part 63.

**Hg**

Mercury

**HHV**

Higher Heating Value. The quantity of heat evolved as determined by a calorimeter where the combustion products are cooled to 60F and all water vapor is condensed to liquid.

**LFG**

Landfill gas

**LHV**

Lower Heating Value. Similar to the higher heating value (see HHV) except that the water produced by the combustion is not condensed but retained as vapor at 60 °F.

**Major Facility**

A facility with potential emissions of: (1) at least 100 tons per year of regulated air pollutants, (2) at least 10 tons per year of any single hazardous air pollutant, and/or (3) at least 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity of hazardous air pollutants as determined by the EPA administrator.

**MAX or Max.**

Maximum

**MFR**

Major Facility Review. The District's term for the federal operating permit program mandated by Title V of the Federal Clean Air Act and implemented by District Regulation 2, Rule 6.

**Mg**

Mega (million) gram

**MIN or Min.**

Minimum

**MOP**

The District's Manual of Procedures.

**MSDS**

Material Safety Data Sheet

**MSW**

Municipal solid waste

**MSWL**

Municipal solid waste landfill

**MTBE**

methyl tertiary-butyl ether

**MW**

Molecular weight

**N2 or N<sub>2</sub>**

Nitrogen

**NA**

Not Applicable

**NAAQS**

National Ambient Air Quality Standards

**NESHAPS**

National Emission Standards for Hazardous Air Pollutants. See in 40 CFR Parts 61 and 63

**NMHC**

Non-methane Hydrocarbons (Same as NMOC)

**NMOC**

Non-methane Organic Compounds (Same as NMHC)

**NO<sub>x</sub> or NO<sub>x</sub>**

Oxides of nitrogen.

**NSPS**

Standards of Performance for New Stationary Sources. Federal standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the Federal Clean Air Act, and implemented by 40 CFR Part 60 and District Regulation 10.

**NSR**

New Source Review. A federal program for pre-construction review and permitting of new and modified sources of pollutants for which criteria have been established in accordance with Section 108 of the Federal Clean Air Act. Mandated by Title I of the Federal Clean Air Act and implemented by 40 CFR Parts 51 and 52 and District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

**O<sub>2</sub> or O<sub>2</sub>**

Oxygen

**Offset Requirement**

A New Source Review requirement to provide federally enforceable emission offsets for the emissions from a new or modified source. Applies to emissions of POC, NO<sub>x</sub>, PM<sub>10</sub>, and SO<sub>2</sub>.

**Phase II Acid Rain Facility**

A facility that generates electricity for sale through fossil-fuel combustion and is not exempted by 40 CFR 72 from Titles IV and V of the Clean Air Act.

**POC**

Precursor Organic Compounds

**PM**

Particulate Matter

**PM<sub>10</sub> or PM<sub>10</sub>**

Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns

**PSD**

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of those air pollutants for which the District is classified "attainment" of the National Air Ambient Quality Standards. Mandated by Title I of the Act and implemented by both 40 CFR Part 52 and District Regulation 2, Rule 2.

**PV or P/V Valve**

Pressure/Vacuum Valve

**Regulated Organic Liquid**

"Regulated organic liquids" are those liquids which require permits, or which are subject to some regulation, when processed at a liquid-handling operation. For example, for refinery marine terminals, regulated organic liquids are defined as "organic liquids" in Regulation 8, Rule 44.

**RMP**

Risk Management Plan

**RWQCB**

Regional Water Quality Control Board

**S**

Sulfur

**SCR**

A "selective catalytic reduction" unit is an abatement device that reduces NO<sub>x</sub> concentrations in the exhaust stream of a combustion device. SCRs utilize a catalyst, which operates at a specific temperature range, and injected ammonia to promote the conversion of NO<sub>x</sub> compounds to nitrogen gas.

**SIP**

State Implementation Plan. State and District programs and regulations approved by EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the Act.

**SO<sub>2</sub> or SO<sub>2</sub>**

Sulfur dioxide

**SO<sub>3</sub> or SO<sub>3</sub>**

Sulfur trioxide

**SSM**

Startup, Shutdown, or Malfunction

**SSM Plan**

A plan, which states the procedures that will be followed during a startup, shutdown, or malfunction, that is prepared in accordance with the general NESHAP provisions (40 CFR Part 63, Subpart A) and maintained on site at the facility.

**TAC**

Toxic Air Contaminant (as identified by CARB)

**THC**

Total Hydrocarbons (NMHC + Methane)

**therm**

100,000 British Thermal Unit

**Title V**

Title V of the federal Clean Air Act. Requires a federally enforceable operating permit program for major and certain other facilities.

**TOC**

Total Organic Compounds (NMOC + Methane, Same as THC)

**TPH**

Total Petroleum Hydrocarbons

**TRMP**

Toxic Risk Management Policy

**TRS**

Total Reduced Sulfur

**TSP**

Total Suspended Particulate

**TVP**

True Vapor Pressure

**VMT**

Vehicle Miles Traveled

**VOC**

Volatile Organic Compounds

**Symbols:**

|   |   |                          |
|---|---|--------------------------|
| < | = | less than                |
| > | = | greater than             |
| ≤ | = | less than or equal to    |
| ≥ | = | greater than or equal to |

**Units of Measure:**

|                 |   |                                |
|-----------------|---|--------------------------------|
| atm             | = | atmospheres                    |
| bbl             | = | barrel of liquid (42 gallons)  |
| bhp             | = | brake-horsepower               |
| btu             | = | British Thermal Unit           |
| BTU             | = | British Thermal Unit           |
| °C              | = | degrees Centigrade             |
| cfm             | = | cubic feet per minute          |
| dscf            | = | dry standard cubic feet        |
| °F              | = | degrees Fahrenheit             |
| ft <sup>3</sup> | = | cubic feet                     |
| g               | = | grams                          |
| gal             | = | gallon                         |
| gpm             | = | gallons per minute             |
| gr              | = | grains (7000 grains = 1 pound) |
| hp              | = | horsepower                     |
| hr              | = | hour                           |
| in              | = | inches                         |
| kg              | = | kilograms                      |
| kW              | = | kilowatts                      |
| lb              | = | pound                          |
| lb-mol          | = | pound-mole                     |
| M               | = | thousand                       |
| m <sup>2</sup>  | = | square meter                   |
| m <sup>3</sup>  | = | cubic meters                   |
| max             | = | maximum                        |
| Mg              | = | mega-grams (1000 kg)           |
| min             | = | minute                         |
| mm              | = | millimeter                     |
| MM              | = | million                        |

Permit Evaluation and Statement of Basis: Plant No A0148, Ball Metal Beverage Container Corporation  
2400 Huntington Drive, Fairfield, CA 94533

|                 |   |                                    |
|-----------------|---|------------------------------------|
| MMBTU           | = | million BTU                        |
| MMcf            | = | million cubic feet                 |
| mm Hg           | = | millimeters of mercury (pressure)  |
| MW              | = | megawatts                          |
| ppb             | = | parts per billion                  |
| ppbv            | = | parts per billion, by volume       |
| ppbw            | = | parts per billion, by weight       |
| ppm             | = | parts per million                  |
| ppmv            | = | parts per million, by volume       |
| ppmw            | = | parts per million, by weight       |
| psia            | = | pounds per square inch, absolute   |
| psig            | = | pounds per square inch, gauge      |
| scf             | = | standard cubic feet                |
| scfm            | = | standard cubic feet per minute     |
| sdcf            | = | standard dry cubic feet            |
| sdcfm           | = | standard dry cubic feet per minute |
| therms          | = | 1 therm = 100,000 BTU              |
| yd              | = | yard                               |
| yd <sup>3</sup> | = | cubic yards                        |
| yr              | = | year                               |

## APPENDIX B

### PERMIT APPLICATION ENGINEERING EVALUATIONS



## **APPENDIX B**

### **PERMIT APPLICATION ENGINEERING EVALUATIONS**

Engineering Evaluations for the following permit applications are attached to the Statement of Basis in this Appendix.

| <b><u>AN</u></b> | <b><u>TITLE</u></b>                      |
|------------------|--|
| 16426            | New Fire Pump Engine                     |
| 21856            | Replace Bottom Rim Coaters               |
| 24253            | Boiler Replacements                      |
| 24281            | Can Washing Operations with Drying Ovens |

**ENGINEERING EVALUATION**  
**Ball Metal Beverage Container Corp.**  
**Plant: 148; Application: 16426**

**BACKGROUND**

Ball Metal Beverage Container Corp. has applied to obtain an Authority to Construct (AC) and/or a Permit to Operate (PO) for the following equipment:

- (i) S-70 Fire Pump at 2400 Huntington Dr.  
Clarke, Model: JU6H-UF50 Fairfield, CA 94533  
210 BHP, 1.47 MMBTU/hr

**EMISSIONS**

**Annual Average Emissions:**

- Basis:
- 210 hp output rating
  - 50 hr/yr operation for testing and maintenance
  - NMHC + NO<sub>x</sub>, CO and PM<sub>10</sub> emission factors provided by California ATCM Tier 2; 5% of NMHC +NO<sub>x</sub> is taken to be POC

|                          |              |
|--------------------------|--------------|
| NMHC + NO <sub>x</sub> : | 4.9 g/hp-hr  |
| NMHC (~POC):             | 0.13 g/hp-hr |
| NO <sub>x</sub> :        | 4.77 g/hp-hr |
| CO:                      | 0.59 g/hp-hr |
| PM <sub>10</sub> :       | 0.14 g/hp-hr |

**NO<sub>x</sub>:**

$$= (50 \text{ hr/yr})(210 \text{ hp})(4.77 \text{ g/hp-hr})(\text{lb}/454 \text{ g})$$
$$= 110.32 \text{ lb/yr } \underline{\text{or}} \text{ } 0.0552 \text{ TPY}$$

**POC:**

$$= (50 \text{ hr/yr})(210 \text{ hp})(0.13 \text{ g/hp-hr})(\text{lb}/454 \text{ g})$$
$$= 3.01 \text{ lb/yr } \underline{\text{or}} \text{ } 0.0015 \text{ TPY}$$

**CO:**

$$= (50 \text{ hr/yr})(210 \text{ hp})(0.59 \text{ g/hp-hr})(\text{lb}/454 \text{ g})$$
$$= 13.65 \text{ lb/yr } \underline{\text{or}} \text{ } 0.0068 \text{ TPY}$$

**PM<sub>10</sub>:**

$$= (50 \text{ hr/yr})(210 \text{ hp})(0.14 \text{ g/hp-hr})(\text{lb}/454 \text{ g})$$
$$= 3.24 \text{ lb/yr } \underline{\text{or}} \text{ } 0.0016 \text{ TPY}$$

SO<sub>2</sub> emissions are quantified based on the full conversion of 0.0015 wt% (~15 ppm) sulfur in the ULS diesel fuel with a density of 7.206 lbs/gal that is consumed at a rate of 10.7 gal/hr.

**SO<sub>2</sub>:**

$$= (0.000015 \text{ lb S/lb fuel})(7.206 \text{ lb fuel/gal fuel})(10.7 \text{ gal fuel/hr})(64 \text{ lb SO}_2/32 \text{ lb S})(50 \text{ hr/yr})$$
$$= 0.1157 \text{ lb/yr } \underline{\text{or}} \text{ } 0.0001 \text{ TPY}$$

**Daily Emissions:**

Daily emissions are calculated to establish whether a source triggers the requirement for BACT (10 lb/highest day total source emissions for any class of pollutants). 24-hr/day of operation will be assumed since no daily limits are imposed on intermittent and unexpected operations.

**NO<sub>x</sub>:**

$$= (24 \text{ hr/day})(210 \text{ hp})(4.77 \text{ g/hp-hr})(\text{lb}/454 \text{ g}) = \mathbf{52.95 \text{ lb/day}}$$

**POC:**

$$= (24 \text{ hr/day})(210 \text{ hp})(0.13 \text{ g/hp-hr})(\text{lb}/454 \text{ g}) = \mathbf{1.44 \text{ lb/day}}$$

**CO:**

$$= (24 \text{ hr/day})(210 \text{ hp})(0.59 \text{ g/hp-hr})(\text{lb}/454 \text{ g}) = \mathbf{6.55 \text{ lb/day}}$$

**PM<sub>10</sub>:**

$$= (24 \text{ hr/day})(210 \text{ hp})(0.14 \text{ g/hp-hr})(\text{lb}/454 \text{ g}) = \mathbf{1.55 \text{ lb/day}}$$

SO<sub>2</sub> emissions are quantified based on the full conversion of 0.0015 wt% (~15 ppm) sulfur in the ULS diesel fuel with a density of 7.206 lbs/gal that is consumed at a rate of 10.7 gal/hr.

**SO<sub>2</sub>:**

$$= (0.000015 \text{ lb S/lb fuel})(7.206 \text{ lb fuel/gal fuel})(10.7 \text{ gal fuel/hr})(64 \text{ lb SO}_2/32 \text{ lb S})(24 \text{ hr/day})$$

$$= \mathbf{0.0555 \text{ lb/day}}$$

**PLANT CUMULATIVE INCREASE**

Ball Metal Beverage Container Corp. is a new facility. Therefore, the District's database does not contain information on existing emissions at the plant. Table 1 summarizes the cumulative increase in criteria pollutant emissions that will result at Plant 148 from the operation of S-70.

**Table 1**

| <b>Pollutant</b> | <b>Current plant emissions (TPY)</b> | <b>Increase in plant emissions associated with this application (TPY)</b> | <b>Cumulative emissions (Current + Increase) (TPY)</b> |
|------------------|--------------------------------------|---|--|
| NO <sub>x</sub>  | 0                                    | 0.0552  | 0.0552   |
| POC              | 0                                    | 0.0015  | 0.0015   |
| CO               | 0                                    | 0.0068  | 0.0068   |
| PM <sub>10</sub> | 0                                    | 0.0016  | 0.0016   |
| SO <sub>2</sub>  | 0                                    | 0.0001  | 0.0001   |

## **TOXIC RISK SCREENING ANALYSIS**

The cancer risk is calculated based on the emission rate of diesel exhaust particulate matter. Diesel exhaust particulate matter is used as a surrogate for all toxic contaminants found in diesel exhaust. Because the proposed emissions exceed the risk screening trigger level for diesel exhaust particulate matter in Table 2-5-1, a risk screening was performed.

Per the attached August 3, 2007 memo from Daphne Y. Chong, results from the health risk screening analysis indicate that the maximum cancer risk is estimated at 2.6 in a million if the engine were to run for 50 hours/year. In accordance with the District's Risk Management Policy, the above risk level is considered acceptable for an engine such as S-70 that meets TBACT.

### **BACT**

BACT is triggered for NO<sub>x</sub> since the maximum daily emissions of the above pollutant exceeds 10 lb/day. Please refer to the discussion on "Daily Emissions" in page 2 of this evaluation. BACT for this source is presented in the current BAAQMD BACT/TBACT Workbook for this source category as shown below:

### **Source Category**

|         |  |             |                 |
|---------|--|-------------|-----------------|
| Source: | <b><i>IC Engine - Compression Ignition</i></b>       | Revision:   | <b>5</b>        |
|         |  | Document #: | <b>96.1.2</b>   |
| Class:  | <b><i>&gt; or = 175 horsepower output rating</i></b> | Date:       | <b>01/11/02</b> |

### ***Determination***

| POLLUTANT       | BACT<br>1. Technologically Feasible/<br>Cost Effective<br>2. Achieved in Practice<br>3. TBACT   | TYPICAL TECHNOLOGY   |
|-----------------|---|--|
| POC             | 1. 0.30 g/bhp-hr [62 ppmvd @ 15% O <sub>2</sub> ] <sup>a,b</sup><br><br>2. 1.5 g/bhp-hr [309 ppmvd @ 15% O <sub>2</sub> ] <sup>b,c</sup>  | 1. Catalytic Oxidation and CARB or EPA (or equivalent) low-total hydrocarbon emitting certified engine <sup>a,b</sup><br><br>2. CARB or EPA (or equivalent) low-total hydrocarbon emitting certified engine <sup>b,c</sup> |
| NO <sub>x</sub> | 1. 1.5 g/bhp-hr [107 ppmvd @ 15% O <sub>2</sub> ] <sup>a,b</sup><br><br>2. 6.9 g/bhp-hr [490 ppmvd @ 15% O <sub>2</sub> ] <sup>a,b,c</sup><br>3. 6.9 g/bhp-hr [490 ppmvd @ 15 % O <sub>2</sub> ] <sub>2</sub> | 1. Selective Catalytic Reduction (SCR) + Timing Retard + Turbocharger w/ Intercooler <sup>a,b</sup><br>2. Timing Retard ≤ 4° + Turbocharger w/ Intercooler <sup>a,b,c</sup><br>3. Timing Retard ≤ 4° +                     |

|                  |  |   |
|------------------|--|---|
|                  |  | <i>Turbocharger w/ Intercooler</i>  |
| SO <sub>2</sub>  | 1. n/d<br>2. <i>fuel oil &lt; 0.05% sulfur</i> <sup>a,b</sup>  | 1. n/d<br>2. <i>Fuel Selection</i> <sup>a,b</sup>   |
| CO               | 1. n/s<br>2. <i>2.75 g/bhp-hr [319 ppmvd @ 15% O<sub>2</sub>]</i> <sup>b,c</sup>   | 1. <i>Catalytic Oxidation</i> <sup>b</sup><br>2. <i>CARB or EPA (or equivalent) low-CO emitting certified engine</i> <sup>b,c</sup>   |
| PM <sub>10</sub> | 1. n/d<br>2. <i>If practical, gas-fueled engine or electric motor. If not, "California Diesel Fuel" ( fuel oil w/ &lt; 0.05% by weight sulfur and &lt; 20% by volume aromatic hydrocarbons)</i> <sup>b</sup><br>3. <i>0.1 grams/bhp-hr</i> | 1. <i>Catalyst Guard Bed</i> <sup>a,b</sup><br>2. <i>Fuel Selection</i> <sup>b,d</sup><br>3. <i>CARB or EPA (or equivalent) low-particulate matter emitting certified engine, or particulate filter</i> |
| NPOC             | 1. n/a<br>2. n/a   | 1. n/a<br>2. n/a  |

## References

- a. CARB/CAPCOA Clearinghouse
- b. BAAQMD NOTE: IC Engine BACT and TBACT is a low emitting, spark-ignited, gas-fueled engine with lean burn combustion or rich burn with non-selective catalytic reduction, or electric motor. A diesel engine will be permitted only if a gas-fueled engine, or electric motor, is not practical (e.g., a remote location without natural gas availability or electric power, or only a diesel engine will meet the portability and/or power/torque/rpm requirements of the application under review, or the engine is used exclusively for emergency use during involuntary loss of power).
- c. Timing retard, etc. controls alone may be acceptable only in very limited situations for temporary sources.

It can be seen from above that S-70 satisfies the current BACT 2 standard for NO<sub>x</sub> (6.9 g/hp-hr). The more restrictive BACT 1 standard is not applicable to this engine because it will be limited to operation as an emergency standby engine.

## **OFFSETS**

Ball Metal Beverage Container Corp. is a new facility. Table 2 summarizes the increase in criteria pollutant emissions that will result at Plant 148 from the operation of S-70.

**Table 2**

| <b>Pollutant</b> | <b>Increase in Emissions At Plant Since April 5, 1991 <sup>1</sup> (TPY)</b> | <b>Increase in Emissions Associated With This Application (TPY)</b> | <b>Total Emissions (Post 4/5/91 + Increase) (TPY)</b> | <b>Regulation 2-2-302 and 2-2-303 Offset Triggers (TPY)</b> |
|------------------|--|---|---|---|
| NO <sub>x</sub>  | 0  | 0.0552  | 0.0552  | > 10; < 35  |
| POC              | 0  | 0.0015  | 0.0015  | > 10; < 35  |
| CO               | 0  | 0.0068  | 0.0068  | NA  |
| PM <sub>10</sub> | 0  | 0.0016  | 0.0016  | > 1   |
| SO <sub>2</sub>  | 0  | 0.0001  | 0.0001  | > 1   |

It can be seen from Table 2 above that S-70 does not trigger any offset. Therefore, offsets are not warranted for any emission.

## **CARB STATIONARY DIESEL ENGINE ATCM**

The State Office of Administrative Law approved the Airborne Toxic Control Measure (ATCM) on November 8, 2004. State law requires the local Air Districts to implement and enforce the requirements of the ATCM. Effective January 1, 2005, there is a prohibition on the operation of new diesel emergency standby engines greater than 50 bhp unless the following operating requirements and emission standards are met:

**“Stationary Diesel Engine ATCM” section 93115, title 17, CA Code of Regulations.**

### **Diesel PM – General Requirements**

1. Meet 0.15 g/bhp-hr PM standard
2. Operate 50 hours per year, or less, for maintenance and testing (except emergency use and emissions testing)

### **HC,NO<sub>x</sub>, NMHC+NO<sub>x</sub>, CO**

1. Meet standards for off-road engines of the same model year and horsepower rating  
As specified in the OFF-Road Compression Ignition Engine Standards;  
Or if no standards have been established

<sup>1</sup> In PSDP do the following steps to get data on the aggregate sum of all increases as defined in Reg. 2-2-212 after April 5, 1991: option 1 → type of pollutant.

2. Meet the Tier 3 standards in Title 13, CCR, Section 2423 for off-road engines of the same horsepower rating, irrespective of the new engine's model year

This emergency standby diesel engine (S-70) is in compliance with the above ATCM requirements. The diesel engine will operate for no more than 50 hours per year for maintenance and reliability testing. This engine is subject to the EPA Tier 3 requirements for HC, NO<sub>x</sub>, NMHC+NO<sub>x</sub> and CO. As shown in the Table3, the engines meet these requirements.

**Table 3. ATCM Tier 3 Compliance**

|                      | CARB<br>g/bhp-hr | ATCM Tier 3<br>g/bhp-hr |
|----------------------|------------------|-------------------------|
| NMHC (POC)           | 0.13             | N/A                     |
| NO <sub>x</sub>      | 4.77             | N/A                     |
| NMHC+NO <sub>x</sub> | 4.9              | 3.0                     |
| CO                   | 0.59             | 2.6                     |
| PM                   | 0.14             | 0.15                    |

### **STATEMENT OF COMPLIANCE**

S-70 will be operated as an emergency standby engine and therefore is not subject to the emission rate limits in Regulation 9, Rule 8 ("NO<sub>x</sub> and CO from Stationary Internal Combustion Engines"). S-70 is subject to the monitoring and record keeping requirements of Regulation 9-8-530 and the SO<sub>2</sub> limitations of 9-1-301 (ground-level concentration) and 9-1-304 (0.5% by weight in fuel). Regulation 9-8-530 requirements are incorporated into the proposed permit conditions. Compliance with Regulation 9, Rule 1 is very likely since diesel fuel with a 0.05% by weight sulfur is mandated for use in California. Like all combustion sources, S-70 is subject to Regulation 6 ("Particulate and Visible Emissions"). This engine is not expected to produce visible emissions or fallout in violation of this regulation and will be assumed to be in compliance with Regulation 6 pending a regular inspection.

This application is considered to be ministerial under the District's Regulation 2-1-311 and therefore is not subject to CEQA review. The engineering review for this project requires only the application of standard permit conditions and standard emission factors in accordance with Permit Handbook Chapter 2.3.

This facility is over 1,000 feet from the nearest school and therefore is not subject to the public notification requirements of Regulation 2-1-412.

PSD, NSPS and NESHAPS are not triggered.

### **PERMIT CONDITIONS**

COND# 22850 -----

1. Operating for reliability-related activities is limited to 50 hours per year per engine.

[Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection (e)(2)(A)(3) or (e)(2)(B)(3)]

2. The owner or operator shall operate each emergency engine only for the following purposes: to mitigate emergency conditions, for emission testing to demonstrate compliance with a

District, state or Federal emission limit, or for reliability-related activities (maintenance and other testing, but excluding emission testing). Operating hours while mitigating emergency or while emission testing to show compliance with District, state or Federal emission limits is not limited.

[Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection (e)(2)(A)(3) or (e)(2)(B)(3)]

3. The owner/operator shall operate each emergency standby engine only when a non-resettable totalizing meter (with a minimum display capability of 9,999 hours) that measures the hours of operation for the engine is installed, operated and properly maintained.

[Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection (e)(4)(G)(1)]

4. Records: The owner/operator shall maintain the following monthly records in a District-approved log for at least 36 months from the date of entry (60 months if the facility has been issued a Title V Major Facility Review Permit or a Synthetic Minor Operating Permit). Log entries shall be retained on-site, either at a central location or at the engine's location, and made immediately available to the District staff upon request.

- a. Hours of operation for reliability-related activities (maintenance and testing).
- b. Hours of operation for emission testing to show compliance with emission limits.
- c. Hours of operation (emergency).
- d. For each emergency, the nature of the emergency condition.
- e. Fuel usage for each engine(s).

[Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection (e)(4)(I), (or Regulation 2-6-501)]

5. At School and Near-School Operation:

If the emergency standby engine is located on school grounds or within 500 feet of any school grounds, the following requirements shall apply:

The owner or operator shall not operate each stationary emergency standby diesel-fueled engine for non-emergency use, including maintenance and testing, during the following periods:

- a. Whenever there is a school-sponsored activity (if the engine is located on school grounds).
- b. Between 7:30 a.m. and 3:30 p.m. on days when school is in session "School" or "School Grounds" means any public or private school used for the purposes of the education of more than 12 children in kindergarten or any of grades 1 to 12, inclusive, but does not include any private school in which education is primarily conducted in a private home(s). "School" or "School Grounds" includes any building or structure, playground, athletic field, or other areas of school property but does not include unimproved school property.

[Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection (e)(2)(A)(1)] or (e)(2)(B)(2)]



## RECOMMENDATION

Issue Ball Metal Beverage Container Corp. an AC for the following equipment:

|      |                          |    |                     |
|------|--------------------------|----|---------------------|
| (ii) | S-70                     |    |                     |
|      | Fire Pump                | at | 2400 Huntington Dr. |
|      | Clarke, Model: JU6H-UF50 |    | Fairfield, CA 94533 |
|      | 210 BHP, 1.47 MMBTU/hr   |    |                     |

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Milyani H. Rizal  
Air Quality Engineering Intern  
Engineering Division

**Engineering Evaluation**  
**Ball Metal Beverage Container Corp.**  
**Plant: 148**  
**Application 21856**

**I. Background**

Ball Metal Beverage Container Corp. is proposing to modify three existing can lines (#1, #2, and #3) at their Fairfield, California facility. Ball would like to replace three "Bottom Rim Coat Systems" with UV style bottom coaters that do not change the plant's potential to emit.

The modifications will include the installation of the following new pieces of equipment:

**UV Bottom Coater, Line 1, Gerhard Model 37DDRC**  
**UV Bottom Coater, Line 2, Gerhard Model 37DDRC**  
**UV Bottom Coater, Line 3, Gerhard Model 37DDRC**  
**UV Curing Oven, Electric Fusion Light Shield, Model 410QCB**

**II. Emissions Calculations**

There will be no increase in emissions.

**III. Toxic Risk Screening Analysis**

A risk screen is not required because there are no toxic pollutants that exceed the risk screening trigger levels in BAAQMD Regulation 2-5, Table 2-5-1.

**IV. BACT**

The sources are exempt from permit requirements and therefore are not subject to BACT.

**V. OFFSETS**

Offsets are not required.

**VI. STATEMENT OF COMPLIANCE**

The UV Coaters meet the exemption requirements in Regulation 2-1-119.1 because it is a radiation cured coating operation where ultraviolet energy is used to initiate a reaction to form a polymer network, and the sources do not require permitting pursuant to Section 2-1-319.

The UV Oven meets the exemption requirements in Regulation 2-1-119.4 because it is associated with an exempt coating source, it is electrically heated, and it does not require permitting pursuant to Section 2-1-319.

This project is considered to be ministerial under the District's CEQA Regulation 2-1-311 and therefore is not subject to CEQA review.

This project is over 1,000 feet from the nearest school and is therefore not subject to the public notification requirements of Regulation 2-1-412.

A Toxic Risk Screening Analysis is not required for this operation because no toxic compounds are emitted at levels above their screening trigger level.

PSD, NSPS, and NESHAPS are not triggered.

## **VII. RECOMMENDATION**

Issue a Letter of Exemption for the following equipment:

**UV Bottom Coater, Line 1, Gerhard Model 37DDRC**  
**UV Bottom Coater, Line 2, Gerhard Model 37DDRC**  
**UV Bottom Coater, Line 3, Gerhard Model 37DDRC**  
**UV Curing Oven, Electric Fusion Light Shield, Model 410QCB**

**2-1-119 Exemption, Surface Coating and Printing Equipment:** The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319:

**119.1** Any powder coating operation, or radiation cured coating operation where ultraviolet or electron beam energy is used to initiate a reaction to form a polymer network.

**119.4** An oven associated with an exempt coating source, provided that the oven is electrically heated, or the oven is fired exclusively with natural gas, liquefied petroleum gas (e.g. propane, butane, isobutane, propylene, butylenes, and their mixtures) and the maximum firing rate is less than 10 million BTU per hour.

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Faye Bruno  
Air Quality Engineer II



ENGINEERING DIVISION  
PERMIT EVALUATION REPORT

|  |                           |
|--|---------------------------|
| Applicant: Ball Metal Beverage Container Corp. | Plant Number: 148         |
| Date: 03/26/12                                 | Application Number: 24253 |
| Project Title: Replacement Boilers             |                           |

1. BACKGROUND

Ball Metal Beverage Container Corp. has submitted an application for a letter of exemption for the following:

**S-71 Natural Gas Fired Boiler, Cleaver-Brooks, Model No. FLX-700-600-15, 6 MMBTU/hr**

**S-72 Natural Gas Fired Boiler, Cleaver-Brooks, Model No. FLX-700-600-15, 6 MMBTU/hr**

which are exempt per Regulation 2-1-114.1.2.

**2-1-114 Exemption, Combustion Equipment:** The following equipment is exempt from the requirements of Sections 2-1-301 and 302, only if the source does not emit pollutants other than combustion products, and those combustion products are not caused by the combustion of a pollutant generated from another source, and the source does not require permitting pursuant to Section 2-1-319.

**114.1 Boilers, Heaters, Steam Generators, Duct Burners, and Similar Combustion Equipment:**

**1.2** Any of the above equipment with less than 10 million BTU per hour rated heat input if fired exclusively with natural gas (including compressed natural gas), liquefied petroleum gas (e.g. propane, butane, isobutane, propylene, butylenes, and their mixtures), or any combination thereof.

These sources will be subject to Regulation 9, Rule 7-307.2 commencing on January 1, 2013:

**9-7-307 Final Emission Limits:** No person shall operate a boiler, steam generator or process heater with a rated heat input listed in the table below that exceeds the corresponding NOx and CO emission limits on or after the corresponding effective date specified in Section 9-7-308:

| Emission Limit | Rated Heat Input (million BTU/hr) | Fuel    | NOx Limit (ppmv, dry at 3% oxygen) | CO Limit (ppmv, dry at 3% oxygen) |
|----------------|-----------------------------------|---------|------------------------------------|-----------------------------------|
| 307.2          | >5 to <10                         | gaseous | 15                                 | 400                               |

Data from vendor specifies that the boilers will meet the NOx and CO limits.

2. EMISSIONS SUMMARY

There is no increase in emissions since the NOx emission rate is lower, the CO emission rate lower, and the capacity is lower. Due to the decrease in capacity, emission rates for SOx, PM and POC will be lower.

Permit Evaluation and Statement of Basis: Plant No A0148, Ball Metal Beverage Container Corporation  
2400 Huntington Drive, Fairfield, CA 94533



**ENGINEERING DIVISION  
PERMIT EVALUATION REPORT**

|   |                                  |
|---|----------------------------------|
| <b>Applicant:</b> Ball Metal Beverage Container Corp. | <b>Plant Number:</b> 148         |
| <b>Date:</b> 03/26/12                                 | <b>Application Number:</b> 24253 |
| <b>Project Title:</b> Replacement Boilers             |                                  |

**3. TOXIC RISK SCREENING ANALYSIS**

A risk screen was not performed because the toxic pollutants did not exceed the risk screening trigger levels in BAAQMD Regulation 2-5, Table 2-5-1.

**4. BACT**

The sources are exempt from permit requirements and therefore are not subject to BACT.

**5. OFFSETS**

Offsets are not required.

**6. STATEMENT OF COMPLIANCE**

The equipment described in Section 1 is exempt from Sections 2-1-301 and 302, in accordance with the specific section(s) of Regulation 2-1 cited in Section 1.

- This exempt equipment does not emit one or more toxic air contaminants in quantities that exceed the limits listed in Table 2-1-316 of Regulation 2-1. Hence, an Air Toxics Risk Screening is not required.
- This exempt equipment has not received two or more public nuisance violations, under Regulation 1-301 or Section 41700 of the California Health and Safety Code, within any consecutive 180-day period.
- This exempt equipment does not emit any hazardous substances in excess of the quantities listed in Regulation 2-1-318 (for PSD Major Facilities).

Operation of both boilers is subject to and in compliance with Regulation 6, because negligible visible emissions are estimated.

The project is considered to be ministerial under District's CEQA Regulation 2-1-311 and therefore is not subject to CEQA review. The engineering review for this project requires only the application of standard permit conditions and standard emission factors (MOP Chapter 2.3) and therefore is not discretionary as defined by CEQA.

PSD, NSPS, NESHAPs do not apply to this application.

**7. RECOMMENDATION**

Issue a Letter of Exemption to Ball Metal Beverage Container Corp. for the following equipment:

**S-71 Natural Gas Fired Boiler, Cleaver-Brooks, Model No. FLX-700-600-15, 6 MMBTU/hr**

Permit Evaluation and Statement of Basis: Plant No A0148, Ball Metal Beverage Container Corporation  
2400 Huntington Drive, Fairfield, CA 94533



ENGINEERING DIVISION  
PERMIT EVALUATION REPORT

|  |                           |
|--|---------------------------|
| Applicant: Ball Metal Beverage Container Corp. | Plant Number: 148         |
| Date: 03/26/12                                 | Application Number: 24253 |
| Project Title: Replacement Boilers             |                           |

S-72 Natural Gas Fired Boiler, Cleaver-Brooks, Model No. FLX-700-600-15, 6 MMBTU/hr 2

per 2-1-114.1.2

114.1.2 Any of the above equipment with less than 10 million BTU per hour rated heat input if fired exclusively with natural gas (including compressed natural gas), liquefied petroleum gas (e.g. propane, butane, isobutane, propylene, butylenes, and their mixtures), or any combination thereof.

  
By: Faye Bruno  
Air Quality Engineer II

03/26/12  
Date

**Engineering Evaluation**  
**Ball Metal Beverage Container Corp.**  
**Plant: 148**  
**Application 24281**

**I. Background**

Ball Metal Beverage Container Corp. is requesting a Letter of Exemption for the following sources:

- S-73 L1 Washer, 350,000 CPH Cincinnati Can Washer with 8 MMBtu/hr Natural Gas Drying Oven**
- S-74 L2 Washer, 350,000 CPH Cincinnati Can Washer with 3 MMBtu/hr Natural Gas Drying Oven**
- S-75 L3 Washer, 350,000 CPH Cincinnati Can Washer with 7.5 MMBtu/hr Natural Gas Drying Oven**

The can manufacturing process requires the use of lubricants which must be removed before coatings are applied. Ball Metal's can-washing operations use solutions of sulfuric acid to etch the can surface to promote ink/overvarnish adhesion. Facility wide air emissions of acids from can washing operations are typically much less than 1 ton per year and are typically uncontrolled.

The gas drying ovens associated with the can washers are exempt per Regulation 2-1-116.4:

**2-1-116 Exemption, Furnaces, Ovens and Kilns:** The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

**116.4** Drying or heat-treating ovens with less than 10 million BTU per hour capacity provided that a) the oven does not emit pollutants other than combustion products and b) the oven is fired exclusively with natural gas.

**VIII. Emissions Calculations**

There will be no increase in emissions.

**IX. Toxic Risk Screening Analysis**

A risk screen is not required because there are no toxic pollutants that exceed the risk screening trigger levels in BAAQMD Regulation 2-5, Table 2-5-1.

**X. BACT**

The sources are exempt from permit requirements and are therefore not subject to BACT.

**XI. OFFSETS**

Offsets are not required.

**XII. STATEMENT OF COMPLIANCE**

The can washers meet the exemption requirements in Regulation 2-1-118.5 because they use a heated solvent mixture for washing, use only solutions containing less than 2.5 percent VOC (wt), and combustion sources used in the process are exempt under Section 2-1-114.

This project is considered to be ministerial under the District's CEQA Regulation 2-1-311 and therefore is not subject to CEQA review.

This project is over 1,000 feet from the nearest school and is therefore not subject to the public notification requirements of Regulation 2-1-412.

A Toxic Risk Screening Analysis is not required for this operation because no toxic compounds are emitted at levels above their screening trigger level.

PSD, NSPS, and NESHAPS are not triggered.

### **XIII. RECOMMENDATION**

Issue a Letter of Exemption to Ball Metal Beverage Container Corp. for the following equipment:

- S-73 L1 Washer, 350,000 CPH Cincinnati Can Washer with 8 MMBtu/hr Natural Gas Drying Oven**
- S-74 L2 Washer, 350,000 CPH Cincinnati Can Washer with 3 MMBtu/hr Natural Gas Drying Oven**
- S-75 L3 Washer, 350,000 CPH Cincinnati Can Washer with 7.5 MMBtu/hr Natural Gas Drying Oven**

**2-1-116 Exemption, Furnaces, Ovens and Kilns:** The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

**116.4** Drying or heat-treating ovens with less than 10 million BTU per hour capacity provided that a) the oven does not emit pollutants other than combustion products and b) the oven is fired exclusively with natural gas.

**2-1-118 Exemption, Surface Preparation and Cleaning Equipment:** The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319:

**118.5** Equipment using a heated solvent mixture for steam cleaning, surface preparation, fluxing, stripping, wipe cleaning, washing or drying products, provided that a) only solutions containing less than 2.5 percent VOC (wt) are used; and b) any combustion sources used in the process are exempt under Section 2-1-114.

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Faye Bruno  
Air Quality Engineer II